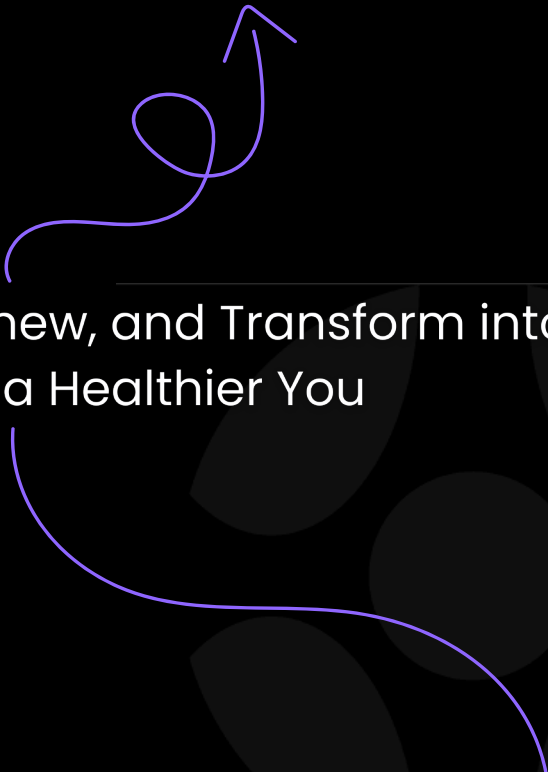




Hyperbaric Oxygen Therapy

HBOT PROTOCOL

Heal, Renew, and Transform into
a Healthier You



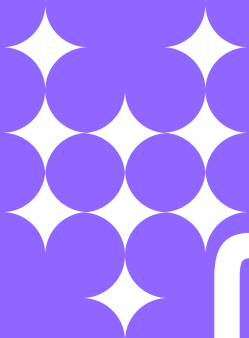


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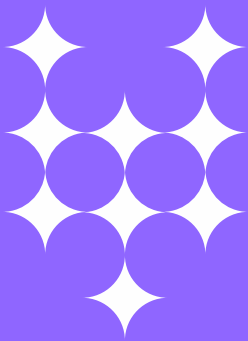


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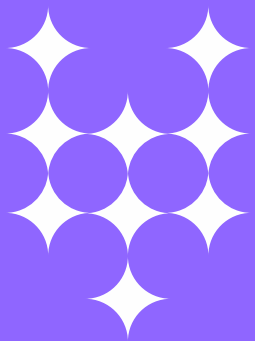


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Mold Toxicity Wellness Protocol

This protocol aims to utilize the potential detoxifying effects of HBOT, enhancing the body's ability to cope with and eliminate toxins associated with mold exposure. It's important to note, however, that this is not a medically approved treatment for mold toxicity and should be considered as a wellness approach pending further clinical evidence.

MOA (Mechanism of Action)

Enhanced detoxification through increased oxygen delivery, anti-inflammatory effects, and improved immune function.



Pt Selection

Individuals who have been exposed to mold environments and are experiencing symptoms such as fatigue, respiratory issues, or cognitive impairments, which they believe to be related to mold toxicity.



Treatment Protocol

Pressure Level: 1.3 - 1.5 ATA with Supplemental Oxygen

Session Length: 60-90 minutes per session

Frequency:

- **Intensive Phase:** 5 sessions per week for the first 5-6 weeks to initiate detoxification and symptom relief. Modified: 3 Sessions for the first 7 weeks.
- **Maintenance Phase:** Depending on individual response, reduce to 2-3 sessions per week for an additional 4-8 weeks.

Follow-Up

Assessment: Evaluation of symptoms related to mold exposure such as respiratory health, cognitive function, and overall vitality at the end of the initial phase.

Adjustments: Based on client feedback, adjustments to the frequency or continuation are based on the alleviation of mold toxicity symptoms.

Additional Recommendations

Hydration: Encourage increased fluid intake to help facilitate the elimination of toxins.

Nutrition: Include foods known to support detoxification processes, such as cruciferous vegetables, berries, and foods rich in antioxidants.

Environmental Adjustments: Advise on reducing mold exposure at home or workplace by addressing moisture issues and considering professional mold remediation.



Safety Precautions:



Ear Pressure Management:

Provide training on techniques to manage ear pressure effectively during session transitions.



Ear Pressure Management:

Provide training on techniques to manage ear pressure effectively during session transitions.



Ear Pressure Management:

Educate clients on the potential benefits and limitations of HBOT for mold toxicity, ensuring they have realistic expectations and understand the therapy is part of a broader wellness strategy.



Safety Precautions:



Oxygen Therapy:

Increased oxygen levels may help in breaking down biotoxins that mold can produce, which are often fat-soluble and stored in tissues, potentially leading to their mobilization and excretion.



Immune Support:

Enhanced oxygenation can support the immune system, potentially improving the body's natural ability to clear mold spores and toxins.



Reduction in Inflammatory Responses:

Chronic exposure to mold can trigger inflammatory processes; HBOT may help in reducing systemic inflammation, thereby alleviating symptoms.

This HBOT protocol for mold toxicity is aimed at enhancing the body's detoxification pathways and improving symptoms associated with mold exposure through regular, structured sessions of oxygen therapy. Always ensure clients have a comprehensive health evaluation and consider consulting healthcare professionals familiar with mold toxicity and its management.

Migraine Wellness Protocol

This protocol is designed as a wellness approach and should be viewed as complementary to other traditional medical treatments for migraines.

MOA (Mechanism of Action)

Hyperoxygenation: Increases the oxygen levels in the blood, which can enhance tissue oxygenation and potentially alleviate the brain hypoxia sometimes associated with migraines.

Vasoconstriction: Helps reduce the dilation of blood vessels that is often a component of migraine headaches, potentially easing the pain.



Pt Selection

Individuals experiencing migraines, with or without aura, seeking alternative or complementary approaches to manage their condition.



Treatment Protocol

Pressure Level: 1.3 – 1.5 ATA with Supplemental Oxygen

Session Length: 60 minutes per session

Frequency:

- **Acute Phase:** During a migraine episode, sessions can be scheduled as needed, preferably at the onset of symptoms.
- **Prophylactic Phase:** 2–3 sessions per week during a proactive 30–45 day period aimed at reducing the frequency and severity of migraine attacks.
- **Maintenance Phase:** Once weekly or bi-weekly sessions after the proactive phase, depending on individual response and reduction in migraine frequency/severity.

Follow-Up

Assessment: Evaluate the reduction in migraine frequency, duration, and intensity after the initial prophylactic phase.

Adjustments: Based on client feedback and efficacy, adjust the frequency of sessions or maintenance schedule to optimize individual outcomes.

Additional Recommendations

Hydration: Encourage clients to maintain adequate hydration, as dehydration can be a migraine trigger.

Nutrition: Advise on a diet that avoids known migraine triggers, which can vary widely between individuals but often include aged cheeses, red wine, processed meats, and artificial sweeteners.

Environmental Adjustments: Stress management techniques such as meditation, yoga, and regular physical activity can complement the HBOT protocol by reducing potential migraine triggers.



Safety Precautions:



Hydration:

Encourage clients to maintain adequate hydration, as dehydration can be a migraine trigger.



Nutrition:

Advise on a diet that avoids known migraine triggers, which can vary widely between individuals but often include aged cheeses, red wine, processed meats, and artificial sweeteners.



Environmental Adjustments:

Stress management techniques such as meditation, yoga, and regular physical activity can complement the HBOT protocol by reducing potential migraine triggers.



Safety Precautions:



Oxygen Saturation:

Increased oxygen levels may improve cellular function and energy production in the brain, which could help mitigate migraine symptoms.



Vascular Regulation:

The vasoconstrictive effect of HBOT may counteract the vasodilation phase of migraine attacks, potentially providing relief from symptoms.



Reduction in Inflammatory Responses:

Chronic exposure to mold can trigger inflammatory processes; HBOT may help in reducing systemic inflammation, thereby alleviating symptoms.

This HBOT protocol for migraines aims to leverage the therapeutic benefits of increased atmospheric pressure and oxygen to provide relief from migraine symptoms and reduce the frequency of migraine episodes. It is important to ensure that clients also follow up with their healthcare provider to address any treatment causatives of their migraines and to integrate HBOT into a comprehensive treatment plan.

Cancer Management Protocol

This protocol is designed to potentially enhance the effectiveness of conventional cancer treatments like radiation therapy. It should be emphasized that HBOT should not be seen as a standalone treatment for cancer but as an adjunct therapy that may help improve treatment outcomes and patient resilience.

Goal:

Enhance sensitivity to radiation therapy and promote a more aerobic environment in the body.

MOA (Mechanism of Action)

Cytokine Reduction: Potentially reduces inflammation which can influence cancer progression and patient discomfort.

Stem Cell Release and Growth Factor Release: This may aid in tissue repair and regeneration, important for recovery during and after conventional cancer treatments.

Mitogenesis: Encourages the formation of new cells which can be beneficial in repairing radiation-induced damage.

Hyperfusion: Increases blood flow to tissues, potentially improving oxygenation and delivery of nutrients, and enhancing the removal of waste products.



Pt Selection

Individuals undergoing radiation therapy for cancer, who are cleared by their oncologist for adjunctive HBOT.



Treatment Protocol

Pressure Level: 1.3 – 1.5 ATA with Supplemental Oxygen

Session Length: Session length to be determined by clinical guidelines and patient tolerance, typically around 60–90 minutes.

Frequency:

- **During Radiation Therapy:** 5 days per week, aligning closely with radiation treatment schedules to potentially enhance radio sensitivity. Modified: 3 sessions for the first 8–10 weeks.
- **Post-Radiation Therapy:** Depending on the clinical situation, 1–2 sessions weekly to aid recovery and mitigate side effects of radiation.

Follow-Up

Assessment: Regular evaluation of treatment response via clinical assessments and in coordination with oncology care teams.

Adjustments: Adjustments: Adjust treatment frequency, duration, and additional supportive care based on patient response, side effects, and oncologist recommendations.

Additional Recommendations

Hydration: Ensure patients are well-hydrated to help manage potential side effects of both HBOT and radiation therapy.

Nutrition: Supportive nutritional counseling to help manage side effects and enhance overall well-being.

Environmental Adjustments: Integrate strategies for pain and symptom management as part of a comprehensive cancer care plan.



Safety Precautions:



Ear Pressure Management:

Provide clear instructions and support for managing changes in ear pressure, which can be more sensitive in cancer patients.



Monitor for Side Effects:

Closely monitor for any signs of oxygen toxicity, particularly given the higher pressure and oxygen levels used.



Client Education:

Educate patients about the potential benefits and limitations of HBOT in the context of cancer treatment, ensuring informed consent and alignment with overall treatment goals.



Scientific Rationale:



Enhanced Radiosensitivity:

The increased oxygen levels may make cancer cells more susceptible to radiation by creating an oxygen-rich environment, which is less favorable for the anaerobic nature of many cancer cells.



Tissue Recovery:

The therapeutic effects of increased oxygenation may promote faster healing of normal tissues damaged by radiation.

This HBOT protocol for cancer management aims to utilize the benefits of increased oxygen under pressure to complement traditional cancer therapies, potentially enhancing treatment efficacy and improving patient outcomes. Coordination with the oncology team is essential to ensure the safe and effective integration of HBOT into the patient's overall treatment plan.

PTSD Management Protocol

This protocol aims to leverage the potential neurobiological benefits of HBOT to assist in alleviating symptoms associated with PTSD. It is important to note that this approach should be considered as an adjunct to established PTSD treatments such as psychotherapy and medication.

Goal

Facilitate neuroplastic changes and achieve a better balance between the parasympathetic and sympathetic nervous systems.

MOA (Mechanism of Action)

Neurogenesis: Stimulate the growth of new neurons which may help in the recovery of brain function affected by PTSD.

Angiogenesis: Promote the formation of new blood vessels, enhancing blood flow and oxygen delivery to the brain, potentially improving brain health and function.

Cytokine Reduction: Reduce inflammation that may be linked to neurodegenerative processes and mood disorders associated with PTSD.



Pt Selection

Individuals diagnosed with PTSD who are considered suitable for HBOT by their healthcare providers.



Treatment Protocol

Pressure Level: 1.3 - 1.5 ATA with Supplemental Oxygen

Maintenance Phase: Session lengths and specific pressures can vary, typically around 60-90 minutes.

Frequency:

- **Intensive Phase:** 40-60 hours total duration over 8-10 weeks, typically 5 hours per week. Modified: 3 Sessions for the first 14 weeks.
- **Maintenance Phase:** Based on individual outcomes, maintenance sessions may be scheduled at a reduced frequency based on therapeutic response and clinical outcomes, typically 1-2 sessions weekly.

Follow-Up

Assessment: Evaluation of PTSD symptoms, neuropsychological function, and quality of life at the end of the initial intensive phase.

Adjustments: Adjustments based on clinical assessments, patient feedback, and symptom severity.

Safety Precautions:

Ear Pressure Management: Ensure proper techniques are known to patients for managing ear pressure changes, particularly during compression and decompression stages.

Monitor for Side Effects: Observe for any potential cognitive or emotional side effects related to HBOT, adjusting as necessary.

Client Education: Provide education on the adjunctive nature of HBOT for PTSD, emphasizing that it is not a replacement for standard therapies.



Scientific Rationale:

Neuroplasticity Enhancement:

HBOT may promote the healing of brain areas impacted by trauma by increasing oxygen levels and promoting neuroplastic changes.

Inflammation Reduction:

Elevated oxygen levels and anti-inflammatory effects may reduce inflammation, a common contributor to PTSD symptoms.

This HBOT protocol for PTSD aims to enhance standard treatments by potentially supporting brain healing and mitigating some symptoms associated with PTSD. Coordination with mental health professionals is essential for comprehensive patient care.

Anxiety and Depression Management Protocol

This protocol explores the potential mood-enhancing and neurological benefits of HBOT, aiming to support traditional treatment methods such as psychotherapy and pharmacotherapy. It is important to note that HBOT for anxiety and depression is experimental and should be used as part of a holistic mental health treatment plan.

MOA (Mechanism of Action)

Neurogenesis: Stimulates the growth of new neurons, which may contribute to improved brain function and emotional regulation.

Angiogenesis: Enhances the formation of new blood vessels, improving blood flow and oxygen delivery to brain tissues, which can enhance mood and cognitive function.

Cytokine Reduction: Reduces inflammation that may be linked to mood disorders. Chronic inflammation has been associated with depression and anxiety.



Pt Selection

Individuals diagnosed with anxiety and/or depression who are seeking complementary therapies alongside conventional treatments, and who are cleared for HBOT by their healthcare providers.



Treatment Protocol

Pressure Level: 1.3 - 1.5 ATA with Supplemental Oxygen

Session Length: Typical sessions last about 60-90 minutes.

Frequency:

- **Acute Phase:** 3-5 sessions per week for a total of 30-40 sessions, depending on the severity and response. Modified: 2-3 per week.
- **Maintenance Phase:** After the initial intensive phase, sessions can be reduced to 1-2 times per week or as needed based on therapeutic outcomes.

Follow-Up

Assessment: Regular evaluation of mood, anxiety levels, cognitive function, and overall psychological well-being. Utilizing standardized assessment tools can help quantify changes and guide treatment adjustments.

Additional Recommendations

Hydration: Encourage proper hydration before and after sessions to maximize oxygen delivery and support overall health.

Nutrition: Advocate a balanced diet rich in nutrients that support brain health, such as omega-3 fatty acids, antioxidants, and vitamins.

Environmental Adjustments: HBOT should be integrated with ongoing psychological therapies, medications, and lifestyle interventions like mindfulness, exercise, and stress management techniques.



Safety Precautions:



Ear Pressure Management:

Teach and assist with techniques to manage changes in pressure to avoid ear discomfort.



Monitor for Side Effects:

Careful monitoring for any potential adverse effects such as fatigue, sinus pressure, or rare cases of oxygen toxicity.



Client Education:

Inform clients about the experimental nature of using HBOT for anxiety and depression, discussing potential benefits, limitations, and ensuring informed consent.



Scientific Rationale:



Improved Brain Oxygenation:

Enhanced oxygen levels can improve brain metabolism and potentially correct imbalances associated with mood disorders.



Support for Neuroplasticity:

Increased oxygenation may facilitate neuroplastic changes, crucial for recovery in neurobiological pathways affected by anxiety and depression.

This HBOT protocol for anxiety and depression aims to utilize increased oxygen under pressure as a tool to complement and enhance the effectiveness of existing mental health treatments. Coordination with mental health professionals is essential to ensure that HBOT is effectively integrated into the broader treatment strategy and tailored to the individual needs and safety of the patient.

Post-Stroke Recovery Protocol

This protocol is designed to leverage the potential neurorestorative benefits of HBOT to aid in the rehabilitation process for stroke survivors. The aim is to stimulate natural healing mechanisms within the brain by improving oxygen delivery and stimulating neurobiological repair processes. It should be emphasized that HBOT for post-stroke recovery should be integrated into a comprehensive rehabilitation plan that includes physical therapy, occupational therapy, and medical management.

Goal

Target the penumbra (the area surrounding the core of the stroke injury) to promote healing and functional recovery.

MOA (Mechanism of Action)

Neurogenesis: Stimulates the production of growth factors such as Brain-Derived Neurotrophic Factor (BDNF) and Platelet-Derived Growth Factor (PDGF), which support the growth of new neurons and help repair brain tissue..

Angiogenesis: Encourages the formation of new blood vessels, improving blood flow and oxygen delivery to the affected areas of the brain.

Cytokine Reduction: Promotes the mobilization and differentiation of stem cells, aiding in the regeneration and repair of damaged neural tissue.



Pt Selection

Stroke survivors who are in the recovery phase, post-acute treatment, and who have been evaluated by a healthcare professional as suitable candidates for HBOT.



Treatment Protocol

Pressure Level: 1.3 – 1.5 ATA with Supplemental Oxygen

Session Length: Each session typically lasts about 60–90 minutes.

Frequency:

- **Intensive Phase:** 5 days per week, aiming for a total of 50–60 hours of treatment spread over 8–12 weeks. Modified: 3 days per week over 14–18 weeks.
- **Maintenance Phase:** Depending on individual response and recovery progress, maintenance sessions may be considered at a reduced frequency.

Follow-Up

Assessment: Regular assessment of neurological function, motor skills, and cognitive abilities. Utilization of imaging studies (e.g., MRI) to monitor changes in the penumbra and assess brain health.

Adjustments: Treatment parameters and frequency may be adjusted based on recovery progress, tolerance, and ongoing evaluations.

Additional Recommendations:

Assessment: Ensure adequate hydration to optimize blood flow and oxygen delivery.

Nutrition: Implement a diet that supports brain health, rich in anti-inflammatory foods and antioxidants.

Rehabilitative Therapies: Integrate HBOT with other rehabilitative therapies such as physical therapy, occupational therapy, and speech therapy to maximize recovery.



Safety Precautions:



Ear Pressure Management:

Provide instructions and assistance to manage ear pressure effectively to avoid discomfort.



Monitor for Side Effects:

Closely monitor for potential side effects such as fatigue, sinus pressure, or any discomfort due to increased air pressure.



Client Education:

Education: Educate patients and caregivers about the benefits, potential risks, and the experimental nature of HBOT in post-stroke recovery. Ensure they understand that HBOT is an adjunct to traditional stroke rehabilitation treatments.



Scientific Rationale:



Enhanced Oxygenation and Recovery:

Increased oxygen levels can significantly improve oxygenation to damaged areas of the brain, potentially enhancing metabolic activity and supporting recovery processes.



Support for Neuroplasticity:

The stimulated release of growth factors and activation of stem cells contribute to neuroplastic changes that are crucial for recovery after a stroke.

This HBOT protocol for post-stroke recovery aims to harness the therapeutic potential of increased atmospheric pressure and enhanced oxygen to support and accelerate the natural healing processes in the brain following a stroke. Coordination with a comprehensive medical and rehabilitation team is crucial to ensure that HBOT is safely and effectively integrated into the patient's overall recovery plan.

TBI/Concussion Recovery Protocol

This protocol is designed to leverage the potential neurorestorative and anti-inflammatory benefits of HBOT to aid in recovery from brain injuries. HBOT offers a supportive option for neurological conditions, and it should be integrated into a broader treatment plan that may include medical treatment, physical therapy, and cognitive rehabilitation.

Goal

Promote neuroplastic changes and reduce cerebral inflammation to aid in the recovery from traumatic brain injury and concussion.

MOA (Mechanism of Action)

Neurogenesis: Stimulates the production of growth factors such as Brain-Derived Neurotrophic Factor (BDNF) and Platelet-Derived Growth Factor (PDGF), which are crucial for the growth of new neurons and recovery of neural functions.

Angiogenesis: Encourages the formation of new blood vessels to improve blood flow and oxygen delivery, enhancing recovery in damaged brain regions.

Vasoconstriction: Helps reduce excessive blood flow to injured areas, potentially lowering the risk of swelling and further damage.

Cytokine Reduction: Aims to decrease inflammation within the brain, which is often a significant factor following TBI and concussions.



Pt Selection

Individuals who have suffered a mild TBI or concussion and are cleared for HBOT by their healthcare providers.



Treatment Protocol

Pressure Level: 1.3 – 1.5 ATA with Supplemental Oxygen

Session Length: Approximately 60–90 minutes per session.

Frequency:

- **Initial Treatment for Mild TBI/Concussion:** 5 sessions per week for the first 3–4 weeks to address acute symptoms and initiate physiological improvements.
- **Modified:** 3 sessions a week for the first 5–7 weeks.
- **Maintenance Phase:** 1–3 sessions per week for an additional 4–6 weeks, depending on individual response and symptom resolution.

Follow-Up

Assessment: Regular monitoring of cognitive functions, neurological health, and symptom resolution. Imaging studies may be used to observe changes in brain structure and function.

Adjustments: Depending on the patient's response to initial treatments, adjustments may be necessary in terms of additional sessions or modifications in session length and frequency.

Additional Recommendations:

Hydration: Adequate hydration is crucial, especially when undergoing multiple daily sessions.

Nutrition: A diet rich in anti-inflammatory foods and nutrients that support brain health is recommended.

Rehabilitative Therapies: Integration with cognitive and physical rehabilitation therapies to enhance recovery outcomes.



Safety Precautions:



Ear Pressure Management:

Patients should be instructed on how to manage changes in ear pressure to prevent discomfort.



Monitor for Side Effects:

Close monitoring for any adverse effects, such as sinus pressure, fatigue, or, in rare cases, oxygen toxicity.



Client Education:

Patients and their caregivers should be educated about the potential benefits and limitations of HBOT for TBI and concussion recovery. It is important to maintain realistic expectations and understand that HBOT is an adjunct to traditional treatment methods.



Scientific Rationale:



Improved Oxygenation and Neurological Function:

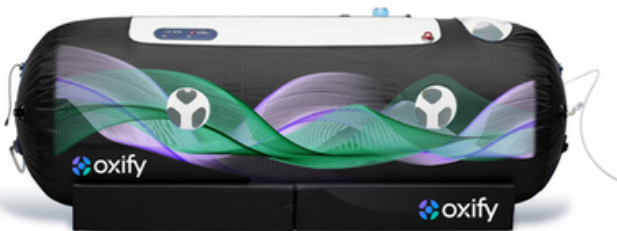
Increased oxygen levels can improve the metabolic activity of brain cells, support healing, and potentially reduce the duration and severity of post-concussion symptoms.



Support for Neuroplasticity:

Neuroplasticity: Enhanced neurogenesis and angiogenesis can facilitate neuroplasticity, which is crucial for recovery after brain injuries.

This HBOT protocol for TBI and concussion aims to utilize the therapeutic benefits of increased oxygen under pressure to aid recovery and reduce complications associated with brain injuries. Coordination with a multidisciplinary healthcare team is essential to ensure that HBOT is safely and effectively integrated into the patient's overall recovery plan.



Cerebral Palsy Management Protocol

This protocol is designed to leverage the potential benefits of HBOT in promoting neuroplasticity and enhancing neurological function. HBOT for cerebral palsy is considered an experimental treatment and should be integrated into a broader medical strategy that includes physical therapy, occupational therapy, and other therapeutic and supportive treatments.

Goal

Promote neuroplastic changes to enhance motor and cognitive functions.

MOA (Mechanism of Action)

Hyperfusion: Increases the blood flow to brain tissues, enhancing oxygen and nutrient delivery which can support brain function and recovery.

Angiogenesis: Encourages the formation of new blood vessels, improving circulation within the brain, which is crucial for healing and development.

Neurogenesis: Stimulates the growth of new neurons, potentially improving neurological function and plasticity.

Stem Cell Activation: Promotes the mobilization and differentiation of stem cells, aiding in the repair and regeneration of damaged neural tissues.



Pt Selection

Individuals diagnosed with cerebral palsy, particularly those in developmental stages where neuroplasticity might be most beneficial. Patients should be evaluated and cleared for HBOT by their healthcare providers.



Treatment Protocol

Pressure Level: 1.3 – 1.5 ATA with Supplemental Oxygen

Session Length: Approximately 60–90 minutes per session.

Frequency:

- **Intensive Phase:** 4–6 hours per week, spread over 10–12 weeks, totaling approximately 60 hours of HBOT. Modified: 2–3 hours per week over 14–18 weeks.
- **Progressive Adjustment:** If improvements are observed, consider integrating sessions with Supplemental Oxygen to potentially enhance therapeutic effects.

Follow-Up

Assessment: Regular evaluations of motor skills, cognitive functions, and overall neurological development.

Adjustments: Based on individual response and progress, adjust the frequency, duration, or modality of HBOT (e.g., transitioning to sessions with supplemental oxygen).

Additional Recommendations:

Hydration: Ensure adequate hydration to optimize blood flow and oxygen delivery.

Nutrition: Support with a nutritious diet that meets developmental needs and supports overall health.

Rehabilitative Therapies: Combine HBOT with physical therapy, occupational therapy, and other rehabilitative services to maximize developmental gains.



Safety Precautions:



Ear Pressure Management:

Instruction and assistance with techniques to manage ear pressure to prevent discomfort.



Monitor for Side Effects:

Close monitoring for any adverse effects, particularly give the sensitivity of younger patients and those with complex medical conditions.



Client Education:

Educate caregivers and patients (as appropriate) about the experimental nature of HB OT for cerebral palsy, discussing potential benefits and limitations.



Scientific Rationale:



Enhanced Brain Function:

Increased blood flow and oxygenation may improve the metabolic activity of brain cells, supporting healing and potentially reducing developmental impairments associated with cerebral palsy.



Support for Neuroplasticity:

The stimulated release of growth factors and activation of stem cells contribute to neuroplastic changes, which are essential for overcoming neurological deficits.

This HBOT protocol for cerebral palsy aims to utilize the therapeutic potential of increased atmospheric pressure and enhanced oxygen delivery to support neurological development and recovery. A multidisciplinary approach, involving coordination with healthcare providers specializing in managing cerebral palsy, is crucial to ensure that HBOT is safely and effectively integrated into the patient's comprehensive care plan.

Vascular Dementia Management Protocol

This protocol aims to leverage the potential benefits of HBOT to enhance blood flow and insulin sensitivity, alongside dietary changes. It is important to note that HBOT for vascular dementia is experimental and should be integrated into a broader management strategy that includes medical treatment, lifestyle modifications, and cognitive therapies.

Type 3 Diabetes and Elevated B6 Levels Context:

These conditions are understood to impact cognitive health, with type 3 diabetes referring to insulin resistance in the brain affecting neuronal survival and function, and elevated B6 levels potentially affecting neurological health.

Goal

Improve cerebral blood flow and enhance metabolic functions in the brain to potentially slow the progression of cognitive decline associated with vascular dementia.

MOA (Mechanism of Action)

Angiogenesis: Stimulates the formation of new blood vessels, potentially improving circulation and oxygen delivery to the brain, which can be beneficial in managing vascular dementia.

Insulin Sensitivity: Enhances insulin sensitivity, which may help in managing brain metabolism, particularly in the context of type 3 diabetes.

Reduced Inflammation: Aims to decrease inflammation in the brain, which is associated with cognitive decline in vascular dementia.

Pt Selection

Individuals diagnosed with vascular dementia, showing symptoms of cognitive decline, who might also present insulin resistance in the brain and elevated B6 levels, and are cleared for HBOT by their healthcare providers.

Treatment Protocol

Pressure Level: 1.3 – 1.5 ATA with Supplemental Oxygen

Session Length: Approximately 60–90 minutes per session.

Frequency:

- **Intensive Phase:** 5–8 hours weekly, typically spread across 3–4 sessions per week.
- **Modified:** 2–3 hours weekly 2–3 sessions.
- **Maintenance Phase:** 3 sessions per week for an additional 6–12 weeks, followed by a long-term maintenance schedule of 1–2 sessions per week based on individual response and long-term response.

Dietary Changes:

Low Sugar Diet: To manage insulin sensitivity and mitigate issues related to type 3 diabetes.

B6 Management: Adjust dietary intake of B6, ensuring levels are managed to avoid exacerbating symptoms.

Brain Health Nutrients: Incorporate foods high in antioxidants, omega-3 fatty acids, and other nutrients known to support brain health.

Assessment: Regular cognitive assessments to monitor changes in cognitive function, alongside blood tests to monitor B6 levels and markers of diabetes and insulin sensitivity.

Adjustments: Treatment parameters may be adjusted based on the patient's cognitive response, blood test results, and overall health status.

Hydration: Encourage adequate hydration to support optimal blood flow and oxygen delivery.

Physical Activity: Gentle, regular exercise as tolerated to help enhance circulation and overall health.



Safety Precautions:



Ear Pressure Management:

Guidance on managing ear pressure changes to prevent discomfort or barotrauma.



Monitor for Side Effects:

Close monitoring for any adverse effects such as fatigue, sinus pressure, or in rare cases, oxygen toxicity.

Client Education:

Educate patients and caregivers about the experimental nature of HBOT for vascular dementia, discussing potential benefits and limitations.



Scientific Rationale:



Enhanced Cerebral Circulation:

Improved blood vessel formation and increased oxygen delivery may help mitigate the effects of vascular deficits in dementia.



Metabolic Support:

Enhanced insulin sensitivity can improve neuronal energy usage and health, potentially slowing cognitive decline.

This HBOT protocol for vascular dementia aims to use the therapeutic benefits of increased oxygen under pressure to support and enhance cerebral metabolic functions and vascular health. It is essential to integrate this treatment into a comprehensive care plan that includes ongoing medical supervision, lifestyle management, and cognitive therapies tailored to the patient's specific needs.



Crohn's/Colitis Management Protocol

This protocol aims to leverage the potential benefits of HBOT to mimic wound healing processes, focusing on enhancing tissue repair and reducing inflammation in the gastrointestinal tract. As with other experimental uses of HBOT, this treatment should be integrated into a broader management plan that includes medical therapies, dietary adjustments, and possibly surgical interventions.

Goal

Accelerate healing of intestinal lesions similar to wound healing, and reduce inflammation associated with Crohn's disease and ulcerative colitis.

MOA (Mechanism of Action)

Stem Cell Release: Stimulates the mobilization of stem cells, which can aid in the repair and regeneration of damaged intestinal tissues.

Cytokine Reduction: Aims to decrease inflammatory cytokines, potentially reducing the chronic inflammation characteristic of inflammatory bowel diseases.

Collagen Formation: Enhances the production of collagen, which is crucial for the structural repair of any damaged intestinal lining.



Pt Selection

Individuals diagnosed with Crohn's disease or ulcerative colitis who are experiencing active inflammation or are in recovery from recent flares, and who are cleared for HBOT by their healthcare providers.



Treatment Protocol

Pressure Level: 1.3 – 1.5 ATA with Supplemental Oxygen

Session Length: Each session lasts approximately 60–90 minutes.

Frequency:

- **Intensive Phase:** Daily sessions, 5 days a week, totaling 40–80 sessions. The range depends on patient response and severity of the condition.
- **Modified:** 3 days per week 40–80 sessions.
- **Maintenance Phase:** Depending on clinical outcomes, maintenance sessions may be scheduled less frequently (e.g., 1–2 times per week) to manage symptoms or maintain remission.

Follow-Up

Assessment: Regular monitoring of symptom severity, inflammatory markers, and intestinal healing through clinical evaluations and imaging/tests as appropriate.

Adjustments: Adjust treatment frequency, pressure levels, or total number of sessions based on therapeutic response and tolerance.

Additional Recommendations:

Hydration: Ensure adequate hydration to help manage potential side effects of HBOT and support overall health.

Nutrition: Dietary management focusing on reducing bowel irritants and supporting intestinal health with a nutrient-rich, anti-inflammatory diet.

Stress Management: Incorporate strategies to manage stress, which can exacerbate symptoms of inflammatory bowel diseases.



Safety Precautions:



Ear Pressure Management:

Provide instructions on techniques to manage changes in ear pressure to prevent discomfort.



Monitor for Side Effects:

Closely monitor for potential adverse effects such as oxygen toxicity, especially considering the higher pressures used in this protocol.



Client Education:

Educate patients about the experimental nature of HBOT for Crohn's and colitis, discussing the potential benefits and limitations.



Scientific Rationale:



Enhanced Tissue Repair:

The increased oxygen delivery can significantly improve tissue oxygenation, which is crucial for healing damaged tissues in the gastrointestinal tract.



Anti-inflammatory Effects:

Reduction in inflammation may help in managing flares and maintaining remission in chronic inflammatory bowel diseases.

This HBOT protocol for Crohn's and colitis aims to utilize the therapeutic benefits of increased atmospheric pressure and oxygen to mimic the body's natural wound healing processes, supporting tissue repair and reducing inflammation in the intestines. Coordination with gastroenterologists and a comprehensive healthcare team is crucial to ensure that HBOT is safely and effectively integrated into the patient's overall treatment plan.

Athletic Performance and Recovery Protocol

This protocol aims to leverage the potential benefits of HBOT in speeding recovery, enhancing oxygen delivery to tissues, and potentially improving athletic performance. It is designed to be an adjunct to traditional training and recovery methods and should be integrated into a comprehensive athletic conditioning and wellness program.

Goal

Enhance recovery from intense physical activities, and improve endurance, and overall athletic performance.

MOA (Mechanism of Action)

Enhanced Oxygen Delivery: HBOT increases the amount of oxygen available to muscle tissues, which can enhance aerobic performance and aid in faster recovery from anaerobic workouts.

Reduced Inflammation: HBOT can help reduce inflammation caused by intense physical exertion, potentially speeding recovery times and reducing the risk of injury.

Stimulated Angiogenesis: Promotes the growth of new blood vessels, improving circulation and long-term oxygen delivery to tissues, which is beneficial for athletic conditioning.



Pt Selection

Selection: Athletes undergoing intense training, those in recovery from sports-related injuries, or individuals looking to enhance their physical performance and recovery processes.



Treatment Protocol

Pressure Level: 1.3 – 1.5 ATA with Supplemental Oxygen

Session Length: Each session lasts approximately 60–90 minutes.

Frequency:

- **During Intensive Training Phases:** 2–3 sessions per week to enhance recovery and maintain high training volumes.
- **Post-Injury Recovery:** Daily session until significant improvement is observed, then taper off based on recovery progress.
- **Off-Season Maintenance:** 1 session per week to maintain benefits and support overall wellness.

Follow-Up

Assessment: Regular evaluation of recovery rates, performance metrics, and physiological adaptations to training.

Adjustments: Adapt session frequency, duration, and pressure based on training intensity, competition schedule, and individual response.

Additional Recommendations:

Hydration: Emphasize staying well hydrated before and after sessions to maximize oxygen transport and detoxification processes.

Nutrition: Focus on a nutrient-rich diet that supports recovery and energy demands, including adequate protein intake for muscle repair and carbohydrates for energy.

Physical Therapy: Incorporate physical therapy and stretching as needed to complement HBOT and support optimal muscle function and joint health.



Safety Precautions:



Ear Pressure Management:

Ensure athletes are trained on how to manage ear pressure during sessions to prevent discomfort.



Monitor for Side Effects:

Watch for signs of oxygen toxicity or barotrauma, especially at higher pressures.



Client Education:

Educate athletes on the potential benefits and limitations of HBOT as part of a sports training and recovery program.



Scientific Rationale:



Improved Recovery Mechanisms:

The additional oxygen delivered during HBOT can enhance mitochondrial efficiency and promote faster healing and recovery of muscle tissues.



Performance Enhancement:

Improved tissue oxygenation may lead to better endurance and performance capabilities, particularly in aerobic sports.

This HBOT protocol for athletic performance and recovery aims to utilize the benefits of increased oxygen under pressure to support and enhance the natural recovery processes, injury management, and overall athletic performance enhancements. Coordination with sports medicine professionals, coaches, and trainers is crucial to ensure that HBOT is safely and effectively integrated into the athlete's training and recovery regimen.

Pre- and Post-Surgery HBOT Protocol

This protocol for using hyperbaric oxygen therapy (HBOT) as a complementary approach to enhance recovery and outcomes for patients undergoing various types of surgeries, including plastic surgery, oral surgery, orthopedic surgery, and eye surgery. This protocol is designed to leverage the potential benefits of HBOT in promoting healing, reducing the risk of infection, and minimizing inflammation and swelling associated with surgical procedures.

Goal

Enhance surgical recovery, reduce the risk of complications, and improve overall healing outcomes.

MOA (Mechanism of Action)

Enhanced Oxygen Delivery: Increases the amount of oxygen delivered to tissues, which can improve wound healing and reduce the risk of infection.

Reduced Inflammation and Swelling: Helps decrease post-operative inflammation and swelling, potentially reducing pain and discomfort.

Stimulated Angiogenesis: Promotes the growth of new blood vessels, improving blood supply to healing tissues and supporting the surgical recovery process.



Pt Selection

Individuals scheduled for elective surgeries such as plastic surgery, oral surgery, orthopedic surgery, etc., who have been evaluated and cleared for HBOT by their healthcare provider.



Treatment Protocol

Pressure Level: 1.3 - 1.5 ATA with Supplemental Oxygen

Session Length: Each session lasts approximately 60-90 minutes.

Frequency:

Pre-Surgery:

Intensive Phase: 3-5 sessions within the week leading up to the surgery to prepare tissues for optimal healing.

Post-Surgery:

Immediate Recovery Phase: Begin HBOT as soon as possible post-surgery, ideally within the first 24-48 hours. Conduct daily sessions for the first week post-surgery.

Extended Recovery Phase: Continue with 3-5 sessions per week for the next 3-5 weeks, depending on the extent of the surgery and individual healing rates.

Follow-Up

Assessment: Regular monitoring of surgical wounds for signs of infection, healing progress, and any complications.

Adjustments: Adapt the number of sessions and their frequency based on individual recovery progress, pain levels, and healing outcomes.

Additional Recommendations:

Hydration: Maintain good hydration to support overall health and optimal oxygen delivery.

Nutrition: Focus on a nutrient-rich diet that supports healing, including proteins, vitamins (especially A and C), and minerals like zinc.

Physical Therapy: Follow post-surgery guidelines provided by the surgical team to avoid disrupting the healing process.



Safety Precautions:



Ear Pressure Management:

Teach techniques for managing changes in ear pressure to avoid discomfort during sessions.



Monitor for Side Effects:

Keep an eye on potential side effects such as oxygen toxicity or claustrophobia, especially in patients new to HBOT.



Client Education:

Inform patients about the benefits, potential risks, and procedure of HBOT in the context of surgical recovery. Ensure they understand that HBOT is an adjunct to their standard post-surgical care.



Scientific Rationale:



Improved Healing:

The extra oxygen can significantly increase the ability of white blood cells to kill bacteria, reduce swelling, and allow new blood vessels to grow more rapidly into the affected areas—all crucial for effective healing.



Reduced Complication Rates:

Improved tissue oxygenation may reduce the risk of complications such as infections, especially in surgeries involving implants or extensive tissue manipulation.

This HBOT protocol for pre- and post-surgery recovery is designed to maximize the healing benefits of increased oxygen under pressure, supporting faster and more effective recovery from surgical procedures. Coordination with the surgical team is essential to integrate HBOT effectively and safely into the overall treatment plan.



Multiple Sclerosis Management Protocol

This protocol aims to leverage the potential benefits of HBOT in reducing inflammation, enhancing neurological function, and potentially slowing disease progression in MS patients. It is important to note that HBOT for MS is considered experimental, and treatment should be integrated into a broader management strategy that includes pharmacotherapy, physical therapy, and lifestyle adjustments.

Goal

Improve neurological function, reduce inflammation, and potentially manage the progression of multiple sclerosis.

MOA (Mechanism of Action)

Enhanced Oxygen Delivery: Increases oxygenation to the brain and spinal cord, which may help improve neural function and repair.

Reduced Inflammation: Aims to decrease the inflammatory response associated with MS, potentially mitigating the impact of acute relapses and contributing to symptom relief.

Stimulated Angiogenesis: Promotes the mobilization and activity of stem cells, which may aid in repairing damaged myelin and nerve tissues.

Pt Selection

Individuals diagnosed with multiple sclerosis, particularly those experiencing recent exacerbations or in progressive stages, who have been evaluated and cleared for HBOT by their healthcare providers.

Treatment Protocol

Pressure Level: 1.3 - 1.5 ATA with Supplemental Oxygen

Session Length: Each session lasts approximately 60-90 minutes.

Frequency:

- **Intensive Phase:** Daily sessions for 4-5 weeks during an exacerbation or noticeable worsening of symptoms.
- **Modified:** 3 times per week 6-8 weeks.
- **Maintenance Phase:** 2-3 sessions per week for an additional 4-8 weeks, followed by ongoing maintenance sessions based on clinical response and disease activity.

Follow-Up

Assessment: Regular monitoring of neurological symptoms, MRI scans to track changes in brain and spinal lesions, and evaluation of physical and cognitive functions.

Adjustments: Treatment parameters may be adjusted based on symptomatology, MRI findings, and overall progression of the disease.

Additional Recommendations:

Hydration: Maintain adequate hydration to optimize tissue oxygenation and overall health.

Nutrition: Support with a diet high in antioxidants and anti-inflammatory foods that may benefit neurological health.

Physical Therapy: Encourage regular physical activity tailored to the patient's capabilities, which can help maintain mobility and function.



Safety Precautions:



Ear Pressure Management:

Provide guidance on managing changes in ear pressure to prevent discomfort and potential complications.



Monitor for Side Effects:

Watch closely for any adverse effects, such as fatigue, sinus pressure, or, in rare cases, oxygen toxicity.



Client Education:

Inform patients about the experimental nature of HBOT in MS treatment, discussing potential benefits, risks, and limitations.



Scientific Rationale:



Neuroprotective Effects:

Increased oxygen levels may provide neuroprotective effects by enhancing mitochondrial function and reducing oxidative stress in neural cells.



Immunomodulatory Potential:

There is some evidence suggesting that HBOT may have immunomodulatory effects that could be beneficial in managing autoimmune aspects of MS.

This HBOT protocol for multiple sclerosis aims to utilize the therapeutic benefits of increased atmospheric pressure and enhanced oxygen to support neurological health, reduce inflammation, and potentially manage disease progression. Coordination with a neurologist and a specialized MS care team is essential to ensure that HBOT is safely and effectively integrated into the comprehensive treatment plan tailored to individual needs of MS patients.

Gut Health Enhancement Protocol

This protocol aims to leverage the potential benefits of HBOT in promoting healing of the gastrointestinal tract, reducing inflammation, and potentially improving conditions related to gut health such as inflammatory bowel diseases (IBD), irritable bowel syndrome (IBS), and other digestive disorders.

Goal

Promote healing of gastrointestinal tissues, reduce inflammation, and improve overall gut function.

MOA (Mechanism of Action)

Enhanced Oxygen Delivery: Increases the oxygenation to gastrointestinal tissues, which may help in healing damaged mucosa and reducing the permeability that often accompanies gut health issues.

Reduced Inflammation: Aims to decrease the inflammatory response in the gastrointestinal tract, potentially alleviating symptoms of chronic conditions like IBD.

Stimulated Angiogenesis: Encourages the mobilization and differentiation of stem cells, aiding in the repair and regeneration of the gut lining.



Pt Selection

Individuals experiencing chronic gastrointestinal issues, including inflammatory bowel diseases, irritable bowel syndrome, and other related conditions, who have been evaluated and cleared for HBOT by their healthcare providers.



Treatment Protocol

Pressure Level: 1.3 - 1.5 ATA with Supplemental Oxygen

Session Length: Each session lasts approximately 60-90 minutes.

Frequency:

- **Intensive Phase:** Daily sessions for the first 4 weeks to address acute
- **Modified:** 3 sessions per week for 4-5 weeks.
- **Maintenance Phase:** 1-3 sessions per week for an additional 4-6 weeks, followed by an assessment to determine the need for further treatment based on symptomatology and response.

Follow-Up

Assessment: Regular evaluation of digestive symptoms, inflammation levels, and overall gastrointestinal health through clinical examination and diagnostic tests such as stool analyses and endoscopic evaluations.

Adjustments: Adjust the frequency and duration of sessions based on clinical outcomes and patient tolerance.

Additional Recommendations:

Hydration: Encourage adequate hydration to support digestion and overall health.

Nutrition: Recommend a diet rich in fiber, low in processed foods, and inclusive of probiotics and prebiotics to support a healthy gut microbiome.

Stress Management: Incorporate stress reduction techniques such as mindfulness, yoga, or meditation, as stress can significantly impact gut health.



Safety Precautions:



Ear Pressure Management:

Instruct patients on techniques to manage changes in ear pressure to prevent discomfort.



Monitor for Side Effects:

Closely monitor for any adverse effects, particularly focusing on the potential for oxygen toxicity.



Client Education:

Educate patients about the potential benefits and limitations of HBOT for gut health, ensuring they understand that HBOT is an adjunct therapy and not a standalone treatment.



Scientific Rationale:



Improved Tissue Repair:

Increased oxygen levels can enhance the capacity for tissue repair and regeneration, which is critical in healing the gut lining damaged by inflammation or other pathological conditions.



Reduced Inflammation:

Lowering systemic and localized inflammation in the gut can lead to improved symptom management and potentially longer periods of remission in chronic conditions.

This HBOT protocol for gut health aims to utilize the therapeutic benefits of increased atmospheric pressure and enhanced oxygen to support healing and reduce inflammation in the gastrointestinal tract. Coordination with gastroenterologists and a comprehensive healthcare team is crucial to ensure that HBOT is safely and effectively integrated into the overall treatment plan for individuals with gut health issues.

Autoimmune Disease Management Protocol

This protocol for using hyperbaric oxygen therapy (HBOT) as a complementary approach in the management of autoimmune diseases. This protocol is designed to leverage the potential benefits of HBOT in reducing inflammation, moderating immune responses, and promoting overall wellness in individuals with autoimmune conditions.

Goal

Mitigate the chronic inflammation associated with autoimmune diseases and enhance the overall quality of life for patients.

MOA (Mechanism of Action)

Cytokine Reduction: Helps reduce levels of pro-inflammatory cytokines, which are often elevated in autoimmune conditions, potentially moderating immune system hyperactivity.

Stem Cell Activation: Promotes the release and activity of stem cells, which can aid in repairing damaged tissues and modulating immune responses.

Enhanced Oxygen Delivery: Increases the amount of oxygen in the blood and tissues, which can improve cellular health and reduce the oxidative stress often seen in autoimmune disorders.



Pt Selection

Individuals diagnosed with autoimmune diseases such as rheumatoid arthritis, lupus, multiple sclerosis, and others, who have been evaluated and cleared for HBOT by their healthcare providers.



Treatment Protocol

Pressure Level: 1.3 - 1.5 ATA with Supplemental Oxygen

Session Length: Each session lasts approximately 60-90 minutes.

Frequency:

- **Intensive Phase:** Daily sessions for the first 3-4 weeks, followed by 3-4 sessions per week for an additional 5-7 weeks.
- **Modified:** 3 times per week 8 weeks.
- **Maintenance Phase:** Depending on individual response and disease activity, maintenance sessions can be scheduled 1-2 times per week or as needed based on assessments.

Follow-Up

Assessment: Regular monitoring of autoimmune symptoms, inflammatory markers, and overall health status.

Adjustments: Adjust the frequency and number of sessions based on symptomatology, disease progression, and patient tolerance.

Additional Recommendations:

Hydration: Ensure adequate hydration to facilitate optimal blood flow and oxygen delivery.

Nutrition: Implement a diet rich in anti-inflammatory foods and antioxidants to support immune system regulation and reduce inflammation.

Stress Management: Encourage practices that reduce stress, such as mindfulness, yoga, or other relaxation techniques, which can positively impact immune function.



Safety Precautions:



Ear Pressure Management:

Instruct on methods to manage ear pressure changes to prevent discomfort or barotrauma.



Monitor for Side Effects:

Closely monitor for any adverse effects, particularly focusing on the potential for oxygen toxicity or claustrophobia.



Client Education:

Educate patients about the potential benefits and limitations of HBOT for autoimmune diseases, ensuring they understand that HBOT is an adjunct therapy and not a cure.



Scientific Rationale:



Immune Modulation:

HBOT has been shown to potentially modulate immune responses, which can be beneficial in managing the overactive immune response in autoimmune diseases.



Reduced Inflammation:

Lowering systemic inflammation can lead to decreased pain and swelling, and potentially slow down the progression of autoimmune diseases.

This HBOT protocol for autoimmune disease management aims to utilize the therapeutic benefits of increased atmospheric pressure and enhanced oxygen to support and enhance the natural regulatory processes of the immune system, reduce inflammation, and improve quality of life. Coordination with a comprehensive healthcare team specializing in autoimmune diseases is crucial to ensure that HBOT is safely and effectively integrated into the patient's overall treatment plan.

Chronic Fatigue And Sleep Enhancement Protocol

This protocol for using hyperbaric oxygen therapy (HBOT) as a complementary approach in managing chronic fatigue syndrome (CFS) and improving sleep quality. This protocol aims to leverage the potential benefits of HBOT in increasing energy levels, reducing fatigue, and enhancing overall sleep quality through physiological improvements.

Goal

Alleviate symptoms of chronic fatigue, enhance energy levels, and improve sleep quality.

MOA (Mechanism of Action)

Enhanced Oxygen Delivery: Increases oxygenation to body tissues, potentially improving mitochondrial efficiency and energy production, which are often compromised in chronic fatigue syndrome.

Reduced Inflammation: Aims to decrease systemic inflammation, which may contribute to fatigue and poor sleep quality.

Stimulated Angiogenesis: Improves oxygen supply to the brain, which may help normalize sleep patterns and enhance sleep quality.



Pt Selection

Individuals diagnosed with chronic fatigue syndrome, experiencing persistent fatigue not relieved by rest, and those suffering from sleep disturbances who have been evaluated and cleared for HBOT by their healthcare providers.



Treatment Protocol

Pressure Level: 1.3 – 1.5 ATA with Supplemental Oxygen

Session Length: Each session lasts approximately 60–90 minutes.

Frequency:

- **Intensive Phase:** 5 sessions per week for the first 6 weeks, aimed at addressing acute symptoms and initiating physiological changes.
- **Modified:** 3 sessions per week for 8 weeks.
- **Maintenance Phase:** Depending on individual response, reduce to 2–3 sessions per week for an additional 4–8 weeks to consolidate benefits and enhance long-term outcomes.

Follow-Up

Assessment: Regular evaluation of fatigue levels, sleep quality (using sleep diaries or sleep quality indices), and overall well-being.

Adjustments: Adapt the number of sessions and their frequency based on improvements in energy levels, reduction in fatigue symptoms, and sleep quality.

Additional Recommendations:

Hydration: Maintain good hydration to optimize blood flow and oxygen delivery.

Nutrition: Emphasize a balanced diet rich in nutrients that support energy metabolism and mitochondrial health.

Stress Management: Encourage consistent sleep routines, reduced exposure to screens before bedtime, and a sleep-conducive environment (dark, quiet, and cool).



Safety Precautions:



Ear Pressure Management:

Provide training on managing ear pressure changes to avoid discomfort during sessions.



Monitor for Side Effects:

Watch for potential side effects such as ear discomfort, sinus pressure, or in rare cases, oxygen toxicity.



Client Education:

Inform patients about the benefits and limitations of HBOT for chronic fatigue and sleep improvement, ensuring they understand it is an adjunctive treatment.



Scientific Rationale:



Mitochondrial Function Improvement:

Enhanced oxygen levels can boost mitochondrial function, crucial for energy production, potentially alleviating feelings of constant fatigue.



Improved Sleep Quality:

By improving brain oxygenation and reducing inflammation, HBOT may help stabilize neurological functions that regulate sleep patterns and enhance overall sleep quality.

This HBOT protocol for chronic fatigue and sleep improvement aims to utilize the therapeutic benefits of increased atmospheric pressure and oxygen to alleviate symptoms of fatigue and improve sleep. Close collaboration with healthcare providers specializing in sleep disorders and chronic fatigue is crucial to safely and effectively integrate HBOT into a comprehensive treatment approach.

Autism and ADHD Management Protocol

This protocol for using hyperbaric oxygen therapy (HBOT) as a complementary approach in the management of Autism Spectrum Disorders (ASD) and Attention Deficit Hyperactivity Disorder (ADHD). This protocol aims to leverage potential benefits of HBOT in improving cognitive function, reducing symptoms of hyperactivity, and enhancing behavioral outcomes.

Goal

Improve cognitive and behavioral functions, reduce symptoms of hyperactivity and impulsivity, and enhance overall developmental outcomes in individuals with ASD and ADHD.

MOA (Mechanism of Action)

Enhanced Oxygen Delivery: Increases oxygenation to the brain, which may help improve neural function, particularly in areas affected in ASD and ADHD.

Reduced Inflammation: Aims to decrease neuroinflammation, which is often implicated in the exacerbation of behavioral and cognitive symptoms in both disorders.

Neurogenesis and Angiogenesis: Promotes the growth of new neurons and blood vessels, potentially improving brain plasticity and functionality.

Pt Selection

Individuals diagnosed with Autism Spectrum Disorders or Attention Deficit Hyperactivity Disorder who exhibit cognitive delays, behavioral challenges, or hyperactivity, and who have been evaluated and cleared for HBOT by their healthcare providers.

Treatment Protocol

Pressure Level: 1.3 – 1.5 ATA with Supplemental Oxygen

Maintenance Phase: Session lengths and specific pressures can vary, typically around 60–90 minutes.

Frequency:

- **Intensive Phase:** Daily sessions for the first 40–60 days, focusing on initiating physiological and cognitive changes.
- **Modified:** 3 times per week for 90 days.
- **Maintenance Phase:** Depending on individual response and improvements, reduce to 2–4 sessions per week for another 8–12 weeks.

Follow-Up

Assessment: Regular monitoring of cognitive improvements, behavioral changes, and social interactions using standardized behavior and cognitive assessments.

Adjustments: Adjust the frequency, duration, and intensity of sessions based on observed progress and feedback from caregivers and therapists.

Additional Recommendations:

Hydration: Ensure adequate hydration to support optimal physiological responses to HBOT.

Nutrition: Recommend a diet that supports brain health, potentially including omega-3 fatty acids, vitamins, and minerals essential for neurological development.

Integrative Therapies: Encourage the continuation of behavioral therapies, educational interventions, and occupational therapies to maximize the benefits of HBOT.



Safety Precautions:



Ear Pressure Management:

Educate on techniques for managing ear pressure to prevent discomfort, particularly important in children who may have difficulty expressing discomfort.



Monitor for Side Effects:

Close monitoring for any adverse effects, such as fatigue, ear pain, or sinus discomfort.



Client Education:

Inform caregivers and patients, when appropriate, about the potential benefits and limitations of HBOT for ASD and ADHD, emphasizing that it is an adjunctive treatment.



Scientific Rationale:



Mitochondrial Function Improvement:

Increased oxygen levels may enhance brain metabolism and energy, which can contribute to improved cognitive function and reduced symptoms of hyperactivity.



Improved Sleep Quality:

By potentially reducing inflammation and enhancing neuroplasticity, HBOT may improve behavioral responses and learning capabilities.

This HBOT protocol for Autism and ADHD aims to utilize the therapeutic benefits of increased oxygen under pressure to support neurological and behavioral improvements. It is essential to work closely with a multidisciplinary team including pediatricians, neurologists, and behavioral therapists to ensure that HBOT is safely and effectively integrated into the comprehensive care plan for these patients.

COVID-19 Long Haulers Management Protocol

This protocol for using hyperbaric oxygen therapy (HBOT) as a complementary approach in managing the persistent symptoms experienced by COVID-19 long haulers. This protocol aims to leverage potential benefits of HBOT in addressing the multi-systemic impacts of long-term COVID-19 symptoms, including fatigue, cognitive impairment, respiratory difficulties, and others.

Goal

Alleviate persistent symptoms associated with long COVID, enhance recovery processes, and improve overall quality of life for affected individuals.

MOA (Mechanism of Action)

Enhanced Oxygen Delivery: Increases oxygenation to tissues and organs that may have been compromised due to COVID-19, potentially aiding in repair and function restoration.

Reduced Inflammation: Aims to decrease systemic inflammation, which is a common feature in long-term COVID and contributes to a variety of symptoms including fatigue and joint pain.

Stimulated Angiogenesis: Improves oxygen supply to the brain, which may help alleviate neurological symptoms such as brain fog, headaches, and cognitive dysfunction.

Pt Selection

Individuals diagnosed with post-acute sequelae of SARS-CoV-2 infection (PASC), commonly known as long COVID, who experience persistent symptoms and have been evaluated and cleared for HBOT by their healthcare providers.

Treatment Protocol

Pressure Level: 1.3 - 1.5 ATA with Supplemental Oxygen

Session Length: Each session lasts approximately 60-90 minutes.

Frequency:

- **Intensive Phase:** Daily sessions for the first 4 weeks, focusing on initiating physiological changes and symptom relief.
- **Modified:** 3 times per week for 6 weeks.
- **Maintenance Phase:** Depending on individual response and improvements, reduce to 3-4 sessions per week for an additional 4-6 weeks.

Follow-Up

Assessment: Regular evaluation of symptom severity, respiratory function, cognitive improvements, and overall physical health.

Adjustments: Adapt the number of sessions and their frequency based on observed improvements, ongoing symptoms, and patient feedback.

Additional Recommendations:

Hydration: Maintain good hydration to support blood flow and oxygen delivery.

Nutrition: Advise on a nutrient-rich diet that supports immune function and overall recovery, potentially including supplements to address specific deficiencies noted in long COVID patients.

Physical and Cognitive Rehabilitation: Encourage appropriate physical activity and cognitive exercises as tolerated, to complement HBOT and enhance overall recovery.



Safety Precautions:



Ear Pressure Management:

Provide instructions on managing changes in ear pressure to prevent discomfort or barotrauma, especially important in patients with lingering respiratory symptoms.



Monitor for Side Effects:

Watch closely for any adverse effects, particularly focusing on potential oxygen toxicity and ensuring compatibility with any residual lung issues.



Client Education:

Educate patients on the potential benefits and limitations of HBOT for long COVID, ensuring they understand it is an adjunct to their standard care regimen.



Scientific Rationale:



Systemic Recovery Support:

Increased oxygen levels can enhance tissue healing, reduce inflammation, and potentially help restore function to organs affected by COVID-19, such as the lungs and heart.



Cognitive and Functional Improvements:

By improving cerebral oxygenation, HBOT may help alleviate the cognitive symptoms of long COVID, supporting a return to pre-illness cognitive and functional levels.

This HBOT protocol for COVID-19 long haulers is designed to utilize the therapeutic benefits of increased atmospheric pressure and enhanced oxygen to support recovery from persistent symptoms of COVID-19. Collaboration with a comprehensive care team, including pulmonologists, neurologists, and rehabilitation specialists, is crucial to ensure that HBOT is safely and effectively integrated into the broader treatment strategy.

Type 2 Diabetes Management Protocol

Goal

Improve metabolic control, enhance insulin sensitivity, and reduce inflammation associated with Type 2 Diabetes.

MOA (Mechanism of Action)

Enhanced Oxygen Delivery: Increases oxygenation to tissues, potentially improving cellular insulin sensitivity and glucose uptake.

Reduced Inflammation: Aims to decrease systemic inflammation, which is often elevated in Type 2 Diabetes and contributes to insulin resistance.

Stimulated Angiogenesis: Although more speculative, increased oxygen delivery may help preserve pancreatic beta-cell function and improve endocrine health.



Pt Selection

Individuals diagnosed with Type 2 Diabetes looking for adjunctive treatments to improve glucose control and reduce complications associated with diabetes. Patients should be evaluated and cleared for HBOT by their healthcare providers, especially considering potential comorbidities like peripheral neuropathy or cardiovascular issues.



Treatment Protocol

Pressure Level: 1.3 - 1.5 ATA with Supplemental Oxygen

Session Length: Each session lasts approximately 60-90 minutes.

Frequency:

- **Intensive Phase:** 5 sessions per week for the first 6 weeks, focusing on initiating metabolic improvements.
- **Modified:** 3 times per week for 8-10 weeks
- **Maintenance Phase:** Depending on individual response and glycemic control, reduce to 2-3 sessions per week for an additional 8-12 weeks.

Follow-Up

Assessment: Regular monitoring of fasting blood glucose levels, HbA1c, insulin sensitivity markers, and overall metabolic health.

Adjustments: Adapt the number of sessions and their frequency based on glycemic control improvements, patient feedback, and other metabolic indicators.

Additional Recommendations:

Hydration: Encourage adequate hydration to support optimal blood flow and metabolic processes.

Nutrition: Advise on a diabetic-friendly diet rich in low-glycemic-index foods, adequate fiber, and limited in processed sugars and fats.

Physical Activity: Recommend regular physical activity tailored to individual capabilities to enhance glucose uptake and insulin sensitivity.



Safety Precautions:



Ear Pressure Management:

Provide guidance on managing changes in ear pressure to prevent discomfort.



Monitor for Side Effects:

Closely monitor for potential adverse effects such as oxygen toxicity, especially in sessions involving higher pressures or longer exposure.



Client Education:

Educate patients about the benefits and limitations of HBOT for managing Type 2 Diabetes, ensuring they understand that HBOT is an adjunct to lifestyle modifications and pharmacotherapy.



Scientific Rationale:



Improved Insulin Sensitivity:

Increased oxygen levels may enhance peripheral tissue oxygenation, which can improve insulin sensitivity and facilitate better glucose control.



Reduced Inflammatory Status:

Lowering inflammation can potentially reverse some of the effects that contribute to the pathophysiology of Type 2 Diabetes.

This HBOT protocol for Type 2 Diabetes is designed to utilize the therapeutic benefits of increased atmospheric pressure and enhanced oxygen to support metabolic improvements and reduce the impact of diabetes. Collaboration with endocrinologists and diabetes care teams is essential to ensure that HBOT is safely and effectively integrated into the patient's comprehensive diabetes management plan.

Neuropathy Management Protocol

Goal

Reduce neuropathic pain, enhance nerve regeneration, and improve overall neurological function.

MOA (Mechanism of Action)

Enhanced Oxygen Delivery: Increases the oxygen supply to nerve tissues, which may help improve nerve function and promote the healing of damaged nerves.

Reduced Inflammation: Aims to decrease inflammation around nerves, potentially easing pain and facilitating recovery.

Stimulated Angiogenesis: Promotes the formation of new blood vessels, improving blood flow to affected areas, which is crucial for delivering nutrients and oxygen to damaged nerves.

Pt Selection

Individuals diagnosed with peripheral neuropathy, whether due to metabolic causes like diabetes, toxic causes like chemotherapy, or idiopathic origins, who have been evaluated and cleared for HBOT by their healthcare providers.

Treatment Protocol

Pressure Level: 1.3 - 1.5 ATA with Supplemental Oxygen

Session Length: Each session lasts approximately 60-90 minutes.

Frequency:

- **Intensive Phase:** 5 sessions per week for the first 5-6 weeks, focusing on initiating physiological changes and symptom relief.
- **Modified:** 3 times per week for 7-8 weeks.
- **Maintenance Phase:** Depending on individual response and improvements, reduce to 2-3 sessions per week for an additional 4-6 weeks. 8-12 weeks.

Follow-Up

Assessment: Regular evaluation of neuropathic symptoms, pain levels, and functional assessments of nerve sensation and reflexes.

Adjustments: Adapt the number of sessions and their frequency based on observed improvements, ongoing symptoms, and patient feedback.

Additional Recommendations:

Hydration: Encourage adequate hydration to support optimal blood flow and metabolic processes.

Nutrition: Advise on a diet rich in nutrients that support nerve health, such as B vitamins, omega-3 fatty acids, and antioxidants.

Physical Therapy: Recommend engaging in physical therapy to complement HBOT, focusing on exercises that enhance blood flow and nerve health.



Safety Precautions:



Ear Pressure Management:

Instruct patients on techniques to manage changes in ear pressure to prevent discomfort.



Monitor for Side Effects:

Watch for potential adverse effects, such as oxygen toxicity, particularly with higher pressures or increased frequency of sessions.



Client Education:

Educate patients about the benefits and limitations of HBOT for neuropathy, ensuring they understand it is an adjunct therapy and not a standalone treatment.



Scientific Rationale:



Improved Insulin Sensitivity:

Increased oxygen levels can boost cellular metabolism and energy production, essential for nerve repair and function.



Reduced Inflammatory Status:

Enhanced oxygenation and reduced inflammation may help alleviate the pain associated with neuropathy.

This HBOT protocol for neuropathy aims to utilize the therapeutic benefits of increased atmospheric pressure and enhanced oxygen to alleviate symptoms and promote nerve healing. Collaboration with neurologists, pain specialists, and a comprehensive healthcare team is crucial to ensure that HBOT is safely and effectively integrated into the patient's overall treatment plan for neuropathy.

Psoriasis Management Protocol

Protocol for using hyperbaric oxygen therapy (HBOT) as a complementary approach in managing psoriasis. This protocol aims to leverage potential benefits of HBOT in reducing skin inflammation, promoting healing, and potentially improving the overall condition of the skin affected by psoriasis.

Goal

Reduce inflammation, alleviate symptoms, and improve skin condition in patients with psoriasis.

MOA (Mechanism of Action)

Enhanced Oxygen Delivery: Increases the oxygen supply to skin tissues, which may help reduce inflammation and promote healing of psoriatic lesions.

Reduced Inflammation: Aims to decrease the systemic and local inflammatory responses that are characteristic of psoriasis.

Stimulated Angiogenesis: Promotes the formation of new blood vessels, potentially improving circulation and the delivery of nutrients to affected areas, aiding in skin repair and health.

Pt Selection

:Individuals diagnosed with psoriasis, particularly those with moderate to severe plaque psoriasis, who have been evaluated and cleared for HBOT by their dermatologists or healthcare providers.

Treatment Protocol

Pressure Level: 1.3 ATA with Supplemental Oxygen

Session Length: Each session lasts approximately 60–90 minutes.

Frequency:

- **Intensive Phase:** 5 sessions per week for the first 3 weeks, focusing on initiating physiological changes and symptom relief.
- **Modified:** 3 times per week for 12 weeks.
- **Maintenance Phase:** Depending on individual response and improvements, reduce to 2–3 sessions per week for an additional 4–8 weeks.

Follow-Up

Assessment: Regular evaluation of skin condition, extent of psoriatic lesions, and assessment of inflammation and itching.

Adjustments: Adapt the number of sessions and their frequency based on observed improvements, ongoing symptoms, and patient feedback.

Additional Recommendations:

Hydration: Encourage adequate hydration to support skin health and detoxification.

Nutrition: Advise on a diet rich in anti-inflammatory foods and omega-3 fatty acids, which can help manage systemic inflammation and support skin health.

Stress Management: Encourage practices that reduce stress, as stress can exacerbate psoriasis symptoms.



Safety Precautions:

Ear Pressure Management:

Provide instructions on managing changes in ear pressure to prevent discomfort.

Monitor for Side Effects:

Watch for potential adverse effects, such as oxygen toxicity, especially with higher pressures or increased frequency of sessions.

Client Education:

Educate patients about the benefits and limitations of HBOT for psoriasis, ensuring they understand that HBOT is an adjunct therapy and not a standalone treatment.



Scientific Rationale:

Improved Skin Healing:

Increased oxygen levels can enhance cellular metabolism and reduce inflammation, which are crucial for repairing damaged skin and reducing the severity of psoriatic plaques.

Reduction in Inflammatory Markers:

By reducing systemic inflammation, HBOT may help to alleviate the symptoms of psoriasis and improve skin appearance.

This HBOT protocol for psoriasis aims to utilize the therapeutic benefits of increased atmospheric pressure and enhanced oxygen to reduce inflammation and promote healing in skin affected by psoriasis. Collaboration with dermatologists and a comprehensive healthcare team is essential to ensure that HBOT is safely and effectively integrated into the patient's overall management plan for psoriasis.

General Wellness Protocol

Goal

Enhance overall health, improve recovery, and support general well-being.

MOA (Mechanism of Action)

Enhanced Oxygen Delivery: Increases the amount of oxygen delivered to tissues, promoting cellular health and function.

Reduced Inflammation: Helps decrease systemic inflammation, which can contribute to various chronic conditions.

Stimulated Angiogenesis: Stimulates the formation of new blood vessels (angiogenesis), enhancing blood flow and nutrient delivery.



Pt Selection

Individuals seeking to improve their general health, enhance recovery from workouts or stress, and support overall wellness.



Treatment Protocol

Pressure Level: 1.3 – 1.5 ATA with Supplemental Oxygen

Session Length: Each session lasts approximately 60–90 minutes.

Frequency:

- **Intensive Phase:** 2–3 sessions per week for the first 6 weeks to kickstart health benefits and physiological improvements.
- **Maintenance Phase:** Depending on individual response and improvements, reduce to 1–2 sessions per week for an additional 6–8 weeks.

Follow-Up

Assessment: Regular evaluations of energy levels, sleep quality, overall vitality, and specific health markers relevant to the individual's goals.

Adjustments: Modify session frequency and duration based on feedback and observed improvements in health and well-being.

Additional Recommendations:

Hydration: Maintain adequate hydration to support optimal oxygen delivery and cellular function.

Nutrition: Encourage a balanced diet rich in nutrients that support overall health, such as antioxidants, vitamins, and minerals.

Stress Management: Incorporate regular physical activity to complement the benefits of HBOT and enhance overall wellness.



Safety Precautions:

Ear Pressure Management:

Provide instructions on managing changes in ear pressure to prevent discomfort.

Monitor for Side Effects:

: Watch for potential adverse effects, such as oxygen toxicity, especially with higher pressures or increased frequency of sessions.

Client Education:

Educate patients about the benefits and limitations of HBOT for psoriasis, ensuring they understand that HBOT is an adjunct therapy and not a standalone treatment.



Scientific Rationale:

Enhanced Cellular Function:

Increased oxygen levels can improve cellular metabolism and energy production, supporting overall health and vitality.

Immune Support:

By reducing inflammation and promoting better circulation, HBOT can support the immune system and overall resilience against illnesses.

This HBOT protocol for psoriasis aims to utilize the therapeutic benefits of increased atmospheric pressure and enhanced oxygen to reduce inflammation and promote healing in skin affected by psoriasis. Collaboration with dermatologists and a comprehensive healthcare team is essential to ensure that HBOT is safely and effectively integrated into the patient's overall management plan for psoriasis.

Disclaimer

The hyperbaric oxygen therapy (HBOT) protocols outlined in the provided content are intended for informational purposes only and are not to be considered as medical advice, diagnoses, or treatment recommendations. While HBOT has shown promise in various applications, it is an experimental treatment for many conditions and should only be used under the supervision and guidance of a qualified healthcare professional.

It is crucial for individuals considering HBOT, particularly for the conditions mentioned, to consult with their doctor or a medical specialist to discuss potential risks, benefits, and the appropriateness of this therapy for their specific health needs. The efficacy and safety of HBOT can vary depending on individual health conditions, severity of symptoms, and overall health profile.

These protocols do not substitute for professional medical advice, diagnosis, or treatment. Relying on any information provided herein is solely at your own risk. Always seek the advice of your physician or other qualified health providers with any questions you may have regarding a medical condition. Never disregard professional medical advice or delay in seeking it because of something you have read in these protocols.

Medical treatments should always be tailored to individual needs and circumstances. Proper medical supervision is essential when considering treatments like HBOT, as incorrect usage can lead to significant health risks.

Task: Running the Small Soft Sided Chamber

Date: 8/9/24

Purpose: Putting people in/out of chamber

No: 1

Materials: person, towel, cannula, equipment in running order, lights, fans

Procedure to Start Chamber:

1. About 10 min before the user comes in, turn on the Air Conditioning unit (button in back and then the red button in the front) and close the flap to start cooling it down inside. (In winter, not always needed)
2. Put a towel on the chamber, if it is a cloth chair.
3. Make sure the two cups inside are not full of water. If they are, remove carefully, dump water and replace.
4. When a user comes in, open the middle and let them step inside and sit down.
5. Make sure they have the cannula, and plug into the tube in the front (by their feet).
6. Ask if they want a light or fan, and give as needed.
7. Turn on condenser, both buttons need to be on the "I" setting to be on. (white machine)
8. Once the user is comfortable, begin zipping up the inner zipper, then the middle zipper and then the blue cover zipper. If the zipper catches at all, unzip a portion and rezip to fully secure. This step is very important. All 3 zippers must be zipped properly and all the way to the top.
9. Turn on the oxygenator (black machine) for the supplemental oxygen.
10. Make sure the decompression knob is in the closed position (you won't hear any air escaping if closed) and make sure the blue cover is under it.
11. Periodically check to make sure the user is good and comfortable.

Task: Running the Small Soft Sided Chamber

Date: 8/9/24

Purpose: Putting people in/out of chamber

No: 1

Materials: person, towel, cannula, equipment in running order, lights, fans

Procedure to Start Chamber:

1. About 10 min before the user comes in, turn on the Air Conditioning unit (button in back and then the red button in the front) and close the flap to start cooling it down inside. (In winter, not always needed)
2. Put a towel on the chamber, if it is a cloth chair.
3. Make sure the two cups inside are not full of water. If they are, remove carefully, dump water and replace.
4. When a user comes in, open the middle and let them step inside and sit down.
5. Make sure they have the cannula, and plug into the tube in the front (by their feet).
6. Ask if they want a light or fan, and give as needed.
7. Turn on condenser, both buttons need to be on the "1" setting to be on. (white machine)
8. Once the user is comfortable, begin zipping up the inner zipper, then the middle zipper and then the blue cover zipper. If the zipper catches at all, unzip a portion and rezip to fully secure. This step is very important. All 3 zippers must be zipped properly and all the way to the top.
9. Turn on the oxygenator (black machine) for the supplemental oxygen.
10. Make sure the decompression knob is in the closed position (you won't hear any air escaping if closed) and make sure the blue cover is under it.
11. Periodically check to make sure the user is good and comfortable.

Procedure to Decompress Chamber:

1. About 10 min before their hour is up, turn off the heater/white compressor.
2. After a few minutes, slowly turn the decompression knob about $\frac{1}{4}$ in. to start letting the compressed air out of the chamber.
3. Every minute, turn the decompression knob another $\frac{1}{4}$ in. until it is completely open.
4. After it is completely open, turn off the oxygenator (black machine).
5. When you can press your hand in the chamber top and it gives way to air, you can begin to unzip the zippers.
6. After all 3 zippers are undone, you need to help the user out, if they are having trouble. Do not let them put any pressure on the chamber – it isn't designed to hold weight or pressure.
7. Unhook cannula from user, they can put it back in their bag and in the box for holding them.
8. Using the UV wand to disinfect the chamber – use safety glasses always.
9. Change the towel.
10. If it is the last user, turn off the air conditioning unit as well, both the red button and the switch in the back.

Task: Running the Large Soft Sided Chamber

Date: 8/9/24

Purpose: Putting people in/out of chamber

No: 1

Materials: person, towel, cannula, equipment in running order, lights, fans

Procedure to Start Chamber:

1. About 10 min before the user comes in, turn on the Air Conditioning unit (button in back and then the red button in the front) and close the flap to start cooling it down inside. (In winter, not always needed)
2. Turn on the air heater by pushing on the button on the back of the big white compressor/oxygenator.
3. Put a towel on the bed.
4. Make sure the two cups inside are not full of water. If they are, remove carefully, dump water and replace.
5. When a user comes in, use the box to step in and the 2 white handles on the sides. Make sure the user is in the middle of the chamber, so the side railings do not tilt.
6. Make sure they have the cannula, and plug into the tube in the front (by their heads).
7. If there is a lift time, show them the button to call Turn on condenser, both buttons need to be on the "1" setting to be on. (white machine)
8. Once the user is comfortable, begin zipping up the inner zipper, then the middle zipper and then the blue cover zipper. If the zipper catches at all, unzip a portion and rezip to fully secure. This step is very important. All 3 zippers must be zipped properly and all the way to the top.
9. Turn on the oxygenator (black machine) for the supplemental oxygen.
10. Make sure the decompression knob is in the closed position (you won't hear any air escaping if closed) and make sure the blue cover is under it.
11. Periodically check to make sure the user is good and comfortable.

Procedure to Decompress Chamber:

1. About 10 min before their hour is up, turn off the heater/white compressor.
2. After a few minutes, slowly turn the decompression knob about $\frac{1}{4}$ in. to start letting the compressed air out of the chamber.
3. Every minute, turn the decompression knob another $\frac{1}{4}$ in. until it is completely open.
4. After it is completely open, turn off the oxygenator (black machine).
5. When you can press your hand in the chamber top and it gives way to air, you can begin to unzip the zippers.
6. After all 3 zippers are undone, you need to help the user out, if they are having trouble. Do not let them put any pressure on the chamber - it isn't designed to hold weight or pressure.
7. Unhook cannula from user, they can put it back in their bag and in the box for holding them.
8. Using the UV wand to disinfect the chamber - use safety glasses always.
9. Change the towel.
10. If it is the last user, turn off the air conditioning unit as well, both the red button and the switch in the back.

Task: Running the Large Soft Sided Chamber

Date: 8/9/24

Purpose: Putting people in/out of chamber

No: 1

Materials: person, towel, cannula, equipment in running order, lights, fans

Procedure to Start Chamber:

1. About 10 min before the client comes in, turn on the Air Conditioning unit (button in back and then the red button in the front) and close the flap to start cooling it down inside. (In winter, not always needed)
2. Put a towel on the chair, if it's a cloth chair.
3. Make sure the 2 cups inside are not full of water. If they are, remove carefully, dump water, and replace.
4. When a client comes in, open the flap and let them step inside and sit down.
5. Make sure they have the cannula and plug it into the tube in the front.
6. Ask if they want a light or fan, and give as needed.
7. Turn on both condensers, both buttons need to be on the "T" setting to be on. (white machines)
8. Once the client is comfortable, begin zipping up the inner zipper, then the middle zipper, and then the blue cover zipper. If the zipper catches at all, unzip a portion and rezip to firmly secure. This step is very important. All 3 zippers must be zipped properly and all the way to the top.
9. Turn on the oxygenator (black machine) for the supplemental oxygen.
10. Make sure the decompression knob is in the closed position (you won't hear any air escaping if closed) and make sure the blue cover is under it.
11. Once the chamber is fully pressurized, turn off the smaller white compressor, put it in the "O" position to be off.
12. Periodically check to make sure the client is good and comfortable.

Procedure to Decompress Chamber:

1. About 10 min before their hour is up, turn off the other white compressor (the big one).
2. After a few minutes, slowly turn the decompression knob about $\frac{1}{2}$ in. to start letting the compressed air out of the chamber.
3. Every minute, turn the decompression knob another $\frac{1}{4}$ in. until it is completely open.
4. After it is completely open, turn off the oxygenator (black machine).
5. When you can press your hand in the chamber at the top and it gives in a lot, you can begin to unzip the zippers.
6. After all 3 zippers are undone, you can take the flap and throw it over the top and let the client out.
7. Unhook cannula from client, they can put it back in their bag and in the box for holding them.
8. Use the UV wand to disinfect the chamber. Use the safety glasses always.
9. Change the towel if needed.
10. If it is the last client, turn off the air conditioning unit as well, both the red button and the switch in the back.