

Medical Policy



An Independent Licensee of the
Blue Cross and Blue Shield Association.

Title: Hyperbaric Oxygen (HBO) Therapy

Professional

Original Effective Date: November 2, 1989
Revision Date(s): June 10, 2003;
August 29, 2003; July 20, 2004
Current Effective Date: August 20, 2004

Institutional

Original Effective Date: June 3, 2004
Revision Date(s): July 20, 2004
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DESCRIPTION

Hyperbaric Oxygen (HBO) Therapy is a modality in which the entire body is exposed to oxygen under increased atmospheric pressure.

POLICY

Covered Conditions:

Benefits are available for hyperbaric oxygen (HBO) therapy that is administered in a chamber (whole body - single or multiple chamber).

HBO therapy is a valuable adjunctive treatment to be used in combination with accepted standard therapeutic measures when loss of function, limb or life is threatened for the following conditions:

1. Acute carbon monoxide poisoning (986); smoke inhalation (987.9); cyanide poisoning (987.7 and 989.0).
2. Decompression sickness (993.2 – 993.3).
3. Cerebral arterial gas embolism (958.0 and 999.1).
4. Clostridial gas gangrene (040.0).
5. Acute traumatic peripheral ischemia (902.53, 903.01, 903.1, 904.0 and 904.41).
6. Crush injuries and suturing of severed limbs (925.1 - 929.9, 996.90 – 996.99).
7. Pyoderma gangrenosum (686.01)
Note: The use of hyperbaric oxygen in any other type of cutaneous ulcer is not covered (problem wounds may be submitted for individual consideration).
8. Osteoradionecrosis as an adjunct to conventional treatment/osteoradionecrosis prevention and prophylactic treatments prior to dental extraction(s) involving areas of previously irradiated bone (526.89).
9. Soft tissue radionecrosis as an adjunct to conventional treatment (990).
10. Acute peripheral arterial insufficiency (444.21, 444.22, 444.81).
11. Preparation and preservation of compromised skin grafts (996.52).
12. Chronic refractory osteomyelitis, unresponsive to conventional medical and surgical management (730.00 – 730.29, 730.80 – 730.89).

13. Actinomycosis, only as an adjunct to conventional therapy when the disease process is refractory to antibiotics and surgical treatment (039.0 – 039.4, 039.8 – 039.9).

Conditions for Review:

1. Selected problem wounds
2. Anaerobic septicemia (038.3) and infection other than clostridial (nonclostridial gas gangrene)
3. Acute thermal burns/radiation tissue injury (940 – 949).

Conditions Not Medically Necessary:

All other diagnosis not previously listed.

Conditions Experimental/Investigational:

1. Multiple Sclerosis (340)
2. Topical Application of Oxygen (THBO) -- does not meet the definition of hyperbaric oxygen therapy as stated above. Also, its clinical efficacy has not been established. Therefore, use of topical oxygen is investigational and therefore non-covered.
3. Claims for Partial Body Hyperbaric Oxygen Therapy should be denied as investigational and therefore non-covered.

DOCUMENTATION

1. There must be medical documentation to support the condition for which HBO therapy is being given.
2. History and physical examination.

UTILIZATION

- A. The Undersea and Hyperbaric Medical Society's 1996 Hyperbaric Oxygen Therapy committee suggests utilization of hyperbaric oxygen therapy guidelines as described below:
 1. Carbon Monoxide poisoning – 5 treatments;
 2. Gas gangrene – 10 treatments
 3. Acute traumatic ischemia – 3 treatments per day for 48 hours followed by 2 treatments per day over the second 48 hours and 1 treatment per day over the third period of 48 hours. Beyond this time period, utilization review should be obtained.
 4. Decompression sickness – treatment times vary, depending upon length of time elapsed between symptoms and initiation of treatment and between residual symptoms after initial treatment. Usual time between treatments ranges from 1.5 to 14.0 hours. Repetitive treatments may be necessary, depending upon the patient's response;
 5. Exceptional blood loss anemia – for class IV hemorrhage, HBO is indicated when the patient will not accept blood replacement for medical or religious reasons and the following symptoms are present:
 - a. Shock, systolic blood pressure below 90 mmHg, or pressure maintained by vasopressors;

- b. Disorientation to coma;
 - c. Ischemic changes of the myocardium as demonstrated on the EKG; and
 - d. Ischemic gut. HBO therapy is continued as needed and discontinued when the red blood cells have been replaced in numbers to alleviate the preceding signs and symptoms;
6. Radiation necrosis – utilization review is required after 60 treatments. Treatments are usually given daily for 90 to 120 minutes.

B. Prophylactic HBO treatments prior to dental extraction(s) involving areas of previously irradiated bone; allow 20 pre-extraction and 10 post extraction HBO treatments.

CODING

REVENUE CODE

413

CPT/HCPCS

99183	Physician attendance and supervision of hyperbaric oxygen therapy, per session
G0167	Hyperbaric oxygen treatment not requiring physician attendance, per treatment session
C1300	Hyperbaric oxygen under pressure, full body chamber, per 30 minute interval

DIAGNOSIS

These diagnoses are otherwise subject to medical policy as stated above

039.0	Actinomycotic infection; cutaneous
039.1	Actinomycotic infection; pulmonary
039.2	Actinomycotic infection; abdominal
039.3	Actinomycotic infection; cervicofacial
039.4	Actinomycotic infection; Madura foot
039.8	Actinomycotic infection; or other specified sites
039.9	Actinomycotic infection; of unspecified site
040.0	Gas gangrene
444.21	Arterial embolism and thrombosis of arteries of the extremities; Upper extremity
444.22	Arterial embolism and thrombosis of arteries of the extremities; lower extremity
444.81	Arterial embolism and thrombosis of other specified arteries; Iliac artery
526.89	Other specified diseases of the jaws
686.01	Pyoderma gangrenosum
730.00- 730.09	Acute osteomyelitis

730.10-730.19	Chronic osteomyelitis
730.20-730.29	Unspecified osteomyelitis
730.80-730.89	Other infections involving bone in diseases classified elsewhere
902.53	Injury to blood vessels of abdomen and pelvis; Iliac artery
903.01	Injury to blood vessels of upper extremity; Axillary artery
903.1	Injury to blood vessels of upper extremity; Brachial blood vessels
904.0	Injury to blood vessels of lower extremity and unspecified sites; common femoral artery
904.41	Injury to blood vessels of lower extremity and unspecified sites; popliteal artery
925.1	Crushing injury of face and scalp
925.2	Crushing injury of neck
926.0	Crushing injury of external genitalia
926.11	Crushing injury of back
926.12	Crushing injury of buttocks
926.19	Crushing injury of other
926.8	Crushing injury of multiple sites of trunk
926.9	Crushing injury of unspecified
927.0	Crushing injury of shoulder and upper arm
927.00	Crushing injury of shoulder region
927.01	Crushing injury of scapular region
927.02	Crushing injury of axillary region
927.03	Crushing injury of upper arm
927.09	Crushing injury of multiple sites
927.10	Crushing injury of forearm
927.11	Crushing injury of elbow
927.20	Crushing injury of hand(s)
927.21	Crushing injury of wrist
927.3	Crushing injury of finger(s)
927.8	Crushing injury of multiple sites of upper limb
927.9	Crushing injury of unspecified site
928.00	Crushing injury of thigh
928.01	Crushing injury of hip
928.10	Crushing injury of lower leg
928.11	Crushing injury of knee
928.20	Crushing injury of foot
928.21	Crushing injury of ankle
928.3	Crushing injury of toes
928.8	Crushing injury of multiple sites of lower limb
928.9	Crushing injury of unspecified site
929.0	Crushing injury of multiple sites, not elsewhere classified

929.9	Crushing injury of unspecified site
958.0	Certain early complications of trauma; air embolism
986	Toxic effect of carbon monoxide
987.7	Toxic effect of hydrocyanic acid gas
987.9	Toxic effect of unspecified gas, fume or vapor
989.0	Toxic effect of other substances; hydrocyanic acid and cyanides
990	Effects of radiation, unspecified
993.2	Effects of air pressure; other and unspecified effects of high altitude
993.3	Caisson disease
996.52	Mechanical complication of other specified prosthetic devices, implant, and graft; due to graft of other tissue, not elsewhere classified
996.90	Complications of reattached extremity or body part; unspecified extremity
996.91	Complications of reattached extremity or body part; forearm
996.92	Complications of reattached extremity or body part; hand
996.93	Complications of reattached extremity or body part; finger
996.94	Complications of reattached extremity or body part; upper extremity, other and unspecified
996.95	Complications of reattached extremity or body part; foot and toe(s)
996.96	Complications of reattached extremity or body part; lower extremity, other and unspecified
996.99	Complications of reattached extremity or body part; other specified body part
999.1	Complications of medical care; air embolism

REVISIONS

July 20, 2004	Added 'and prophylactic treatments prior to dental extractions(s) involving areas of previously irradiated bone' to Policy, Covered Conditions, #8.
	Added 'Prophylactic HBO treatments prior to dental extraction(s) involving areas of previously irradiated bone; allow 20 pre-extraction and 10 post extraction HBO treatments', to Utilization, as new #B.

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