

Corporate Medical Policy

Total Parenteral Nutrition

File Name: total_parenteral_nutrition
Origination: 4/1981
Last Review: 6/2002
Next Review: 6/2004

Active policy, no longer scheduled for routine literature review.

Description of Procedure or Service

Total Parenteral Nutrition (TPN), also referred to as Hyperalimentation, is an extension of nutritional care for patients who either temporarily or permanently have a condition in which the bowel is not able to absorb food properly or they are not able to swallow food. In these cases, nutrition must be achieved by either giving [intravenous](#) fluids containing fat, carbohydrates, vitamins and other substances (TPN), or administering the nutrients directly into the stomach or intestines (enteral nutrition).

Total parenteral nutrition (TPN) involves implanting a catheter into the superior [vena cava](#) or into the right [atrium](#) of the heart. Patients are usually [infused](#) with the nutrients in a solution overnight while sleeping. The catheter is kept open between infusions with a concentrated heparin solution.

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BCBSNC will provide coverage for Total Parenteral Nutrition when it is determined to be medically necessary because the medical criteria and guidelines shown below are met.

Benefits Application

Please refer to Certificate for availability of benefit. See Professional Services.

When Total Parenteral Nutrition is covered

Total Parenteral Nutrition (TPN) is considered medically necessary in the treatment of inanition (starvation) associated with conditions resulting in impaired intestinal absorption including but not limited to the following:

- ◆ Crohn's Disease;
- ◆ Obstruction secondary to [stricture](#) or neoplasm of the [esophagus](#) or stomach;
- ◆ Loss of the swallowing mechanism due to a [central nervous system](#) disorder, where the risk of [aspiration](#) is great;
- ◆ Short bowel syndrome secondary to massive small bowel [resection](#);

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- ◆ **Malabsorption** due to enterocolic, **enterovesical**, or **enterocutaneous fistulas** (TPN being temporary until the **fistula** is repaired);
- ◆ Motility disorder (pseudo-obstruction);
- ◆ Newborn infants with **catastrophic** gastrointestinal anomalies such as **tracheoesophageal fistula**, gastroschisis, omphalocele, or massive intestinal atresia;
- ◆ Infants and young children who fail to thrive due to systemic disease or secondary to intestinal insufficiency associated with short bowel syndrome, malabsorption, or **chronic idiopathic** diarrhea;
- ◆ Patients with prolonged paralytic ileus following major surgery or multiple injuries;
- ◆ Severe radiation enteritis;
- ◆ Patients with severe burns precluding adequate nutrition.

All of the following criteria must be met prior to the initial implementation of TPN:

- ◆ The patient must be in a stage of wasting and all of the following criteria met:
 - 1) Weight is significantly less than normal body weight for a patient's height and age in comparison with pre-illness weight (see policy on Surgery for Morbid Obesity for Metropolitan Insurance height and weight tables).
 - 2) The serum albumin is less than 2.5 gms;
 - 3) BUN is below 10 mg (but is not a good marker in patients receiving dialysis due to protein catabolism);
 - 4) The phosphorus level is less than 2.5 mg (normal phosphorus is 3-4.5 mg);
 - 5) The patient can receive no more than 30% of his/her caloric needs orally or the patient cannot benefit from tube feedings as a result of a malabsorptive disorder.

When Total Parenteral Nutrition is not covered

- ◆ When the medical criteria and guidelines shown above are not met; or
- ◆ When used to increase protein or caloric intake in addition to the patient's daily diet; or
- ◆ In patients with a stable nutritional status, in whom only short term parenteral nutrition might be required (for example, less than 2 weeks); or
- ◆ For routine pre- and/or postoperative care

Policy Guidelines

Total Parenteral Nutrition services may be reviewed on a prior approval or individual consideration basis.

Billing/Coding/Physician Documentation Information

Applicable codes: B4164-B5200, B9004, B9006

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BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Policy Key Words

Key Words: Enteral Feeding, Home Infusion, Hyperalimentation, Parenteral Feeding, (TPN), Malnutrition, Malabsorption

Medical Term Definitions

Aspiration

the act of inhaling; to remove fluids or gases from a cavity by application of suction; the substance or material brought into the respiratory tract while in the act of inhaling.

Atrium

an upper chamber of the heart; plural is atria.

Catastrophic

an acute or prolonged illness usually considered to be life threatening or resulting in serious disability.

Central nervous system

pertains to the brain, cranial nerves, and spinal cord.

Chronic

long-term, not acute or sudden.

Enterocutaneous fistula

an abnormal passage or communication between the intestine and the skin.

Enterovesical

between the bowel and bladder.

Esophagus

the natural tube that connects the mouth to the stomach.

Fistulae

abnormal passage or connection, usually between two internal organs or leading from an internal organ to the surface of the body.

Gastrointestinal tract

(gut) from mouth, to stomach, to bowels, to rectum.

Idiopathic

exact cause is unable to be determined.

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Infuse

the therapeutic introduction of a fluid other than blood into a vein (example: saline solution with a drug added).

Intravenous

within the vein.

Malabsorption

impaired absorption of nutrients in the small intestine.

Resection

surgically removed.

Stricture

a narrowing, especially of a tube or canal, due to scar tissue or a tumor.

Tracheoesophageal fistula

abnormal connection between the windpipe, and the esophagus.

Vena cava

there are two; the large vein which returns blood to the heart from the head, neck, and both upper limbs is the superior vena cava. The inferior vena cava returns blood to the heart from the lower part of the body.

Scientific Background and Reference Sources

BCBSA Medical Policy Reference Manual - 7/31/96

Medical Policy Advisory Group Review - 3/99

Specialty Matched Consultant Advisory Panel - 9/2000

Medical Policy Advisory Group - 10/2000

Specialty Matched Consultant Advisory Panel, 6/2002

BCBSA Medical Policy Reference Manual, 4/15/02. 1.02.01

Policy Implementation/Update Information

4/81	Original Policy issued
12/83	Reaffirmed
11/96	Revised: National Association reviewed 7/96. Added specific patient criteria for coverage.
3/99	Reviewed by MPAG. Reaffirmed.
8/99	Reformatted. Medical Term Definitions added.
10/00	Specialty Matched Consultant Advisory Panel. Removed all information regarding Enteral Nutrition. For Enteral Nutrition, see Enteral Nutrition policy MED1100. For TPN given in the home, see Home Infusion Therapy policy DME0100. System coding changes. Medical Policy Advisory Group review. No changes to policy. Approve.
2/02	Coding format change.

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- 6/02 Specialty matched Consultant Advisory Panel. No changes. Approve.
- 9/03 Policy status changed to: "Active policy, no longer scheduled for routine literature review".
Removed code IV003 from the policy.
- 6/22/10 Policy Number(s) removed (amw)

Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.