Medical Coverage Policy | Plugs for Anal Fistula Repair



EFFECTIVE DATE: 6 | 01 | 2022

POLICY LAST UPDATED: 08 | 02 | 2023

OVERVIEW

Anal fistula plugs (AFPs) are biosynthetic devices used to promote healing and prevent the recurrence of anal fistulas. They are proposed as an alternative to procedures including fistulotomy, endorectal advancement flaps, seton drain placement, and use of fibrin glue in the treatment of anal fistulas.

MEDICAL CRITERIA

Not applicable

PRIOR AUTHORIZATION

Not applicable

POLICY STATEMENT

Medicare Advantage Plans

Biosynthetic fistula plugs, including plugs made of porcine small intestine submucosa or of synthetic material for the repair of anal fistulas, are not covered as the evidence is insufficient to determine the effects of the technology on health outcomes.

Commercial Products

Biosynthetic fistula plugs, including plugs made of porcine small intestine submucosa or of synthetic material for the repair of anal fistulas, are not medically necessary as the evidence is insufficient to determine the effects of the technology on health outcomes.

COVERAGE

Medicare Advantage Plans and Commercial Products

Benefits may vary between groups/contracts. Please refer to the Evidence of Coverage or Subscriber Agreement for applicable not medically necessary/not covered benefits/coverage.

BACKGROUND

Anal Fistulas

An anal fistula is an abnormal communication between the interior of the anal canal or rectum and the skin surface. Rarer forms may communicate with the vagina or other pelvic structures, including the bowel. Most fistulas begin as anorectal abscesses, which are thought to arise from infection in the glands around the anal canal. When the abscess opens spontaneously in the anal canal (or has been opened surgically), a fistula may occur. Studies have reported that 26% to 37% of cases of perianal abscesses eventually form anal fistulas.

Other causes of fistulas include tuberculosis, cancer, prior radiotherapy, and inflammatory bowel disease. Fistulas may occur singly or in multiples. Symptoms include a purulent discharge and drainage of pus and/or stool near the anus, which can irritate the outer tissues causing itching and discomfort. Pain occurs when fistulas become blocked, and abscesses recur. Flatus may also escape from the fistulous tract.

The most widely used classification of anal fistulas is the Parks classification system, which defines anal fistulas by their position relative to the anal sphincter as transsphincteric, intersphincteric, suprasphincteric, or extrasphincteric. More simply, anal fistulas are described as low (present distally and not extending up to the anorectal sling) or high (extending up to or beyond the anorectal sling). The repair of high fistulas can be associated with incontinence. Diagnosis may involve a fistula probe, anoscopy, fistulography, ultrasound, or magnetic resonance imaging.

Treatment

Treatment is aimed at repairing the fistula without compromising continence.

Surgical treatments for anal fistulas include fistulotomy or fistulectomy, endorectal or anal sliding flaps, ligation of the intersphincteric fistula tract (LIFT) technique, seton drain, and fibrin glue. Fistulotomy involves a division of the tissue over the fistula and laying open of the fistula tract. Although fistulotomies are widely used for low fistulas, lay-open fistulotomies in high fistulas carry the risk of incontinence. A seton is a thread placed through the fistula tract to drain fistula material and preventing the development of a perianal infection. Draining setons can control sepsis, but few patients heal after removal of the seton, and the procedure is poorly tolerated long-term. A "cutting seton" refers to the process of regular tightening of the seton to encourage the gradual cutting of the sphincteric muscle with subsequent inflammation and fibrosis. Cutting setons can cause continence disturbances. Endorectal advancement flaps involve the advancement of a full or partial thickness flap of the proximal rectal wall over the internal (rectal) opening of the fistula tract. The intersphincteric fistula tract technique involves identifying the intersphincteric plane and then dividing the fistula tract; its use has been reported in small studies, but long-term follow-up is unavailable.2, Fibrin glue is a combination of fibrinogen, thrombin, and calcium in a matrix, which is injected into the fistula tract. The glue induces clot formation within the tract, which is then closed through the overgrowth of new tissue.

Fistula Plugs

Fistula plugs are designed to provide a structure that acts as a scaffold for new tissue growth. The scaffold, which can be derived from animal (eg, porcine) tissue or a synthetic copolymer fiber, is degraded by hydrolytic or enzymatic pathways as healing progresses. The plug is pulled through the fistula tract and secured at the fistula's proximal opening. The fistula tract is left open at the distal opening to allow drainage. Several fistula plugs have been cleared for marketing by the U.S. Food and Drug Administration (FDA) (see Regulatory Status section).

A fistula plug derived from autologous cartilage tissue has been investigated in a small (N=10) pilot study.

Regulatory Status

Several plugs for anal fistula repair have been cleared for marketing by the FDA through the 510(k) process and are outlined in Table 1.

Table 1. Devices for Anal Fistula Repair

| Device | Year | Description | Indication(s) | Predicate Device(s) | FDA Product Code |
|-----------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------|
| SIS Fistula Plug (Cook Biotech) | Mar 2005 | - Manufactured from porcine SIS | - Repair of anal, rectal, and enterocutaneous fistulas | - Surgisis® Soft Tissue Graft (Cook Biotech) - Stratasis® Urethral Sling (Cook Biotech) | FTM |
| Surgisis RVP Recto-Vaginal Fistula Plug (Cook Biotech) | Oct 2006 | - Manufactured from porcine SIS - Tapered configuration with a button to increase plug retention and improve fistula blockage | - Reinforce soft tissue to repair rectovaginal fistulas | - SIS Fistula Plug (Cook Biotech) | FTM |
| Surgisis Biodesign Enterocutaneous | Feb 2009 | - Manufactured from porcine SIS - Tapered configuration with | - Reinforce soft tissue to repair enterocutaneous fistulas | - SIS Fistula Plug (Cook Biotech) | FTM |

| Fistula Plug (Cook Biotech) | | flange to increase plug retention and improve fistula blockage | | | |
|-----------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----|
| Gore Bio-A Fistula Plug (W.L. Gore & Associates) | Mar 2009 | - Manufactured from bioabsorbable PGA:TMC copolymer - Supplied in a 3- dimensional configuration of a disk with attached tubes | - Reinforce soft tissue to repair anorectal fistulas | - Gore Bioabsorbable Mesh (W.L. Gore & Associates) - SIS Fistula Plug (Cook Biotech) | FTL |
| Biodesign Anal Fistula Plug (Cook Biotech) | May 2016 | - Manufactured from porcine SIS - Additional wash steps added in processing | - Reinforce soft tissue where a rolled configuration is required to repair anal, rectal, and enterocutaneous fistulas | - SIS Fistula Plug (Cook Biotech) | FTM |

CODING

The following code(s) is not covered for Medicare Advantage Plans and not medically necessary for Commercial Products:

46707 Repair of anorectal fistula with plug (e.g., porcine small intestine mucosa [SIS])

RELATED POLICIES

None

PUBLISHED

Provider Update, October 2023 Provider Update, April 2022

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