

SUBJECT: FECAL BACTERIOTHERAPY

EFFECTIVE DATE: 08/16/12

REVISED DATE: 08/15/13, 07/17/14

POLICY NUMBER: 2.01.48

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CATEGORY: Technology Assessment

- *If the member's subscriber contract excludes coverage for a specific service it is not covered under that contract. In such cases, medical policy criteria are not applied.*
- *Medical policies apply to commercial and Medicaid products only when a contract benefit for the specific service exists.*
- *Medical policies only apply to Medicare products when a contract benefit exists and where there are no National or Local Medicare coverage decisions for the specific service.*

POLICY STATEMENT:

- I. Based upon our criteria and assessment of peer-reviewed literature, fecal bacteriotherapy has been medically proven to be effective and is considered **medically appropriate** for the treatment of chronic, refractory clostridium difficile infection (CDI) when ALL of the following have been met:
 - A. Patient has had at least three episodes of recurrent CDI despite the standard antibiotic therapy;
 - B. Patient is not immunocompromised; AND
 - C. The appropriate donor stool screening has been completed (see guidelines below).
- II. Based upon our criteria and assessment of the peer-reviewed literature, fecal bacteriotherapy has not been medically proven to be effective and is considered **investigational** for all other indications, including but not limited to the first line treatment for CDI or the treatment of inflammatory bowel disease.

POLICY GUIDELINES:

- I. The most appropriate donor is a spouse, significant other, or first degree relative if possible. Donor stool screening should follow the FDA guidelines for biologic donors and include at least the following:
 - A. Screening for transmissible bloodborne diseases or other diseases associated with microflora changes (e.g., irritable bowel syndrome, constipation);
 - B. Screening for transmissible pathogens;
 - C. Donor has not had antibiotic therapy for at least three months previous to donation; and
 - D. Donor should not ingest foods that the patient is allergic to.
- II. The Federal Employee Health Benefit Program (FEHBP/FEP) requires that procedures, devices or laboratory tests approved by the U.S. Food and Drug Administration (FDA) may not be considered investigational and thus these procedures, devices or laboratory tests may be assessed only on the basis of their medical necessity.

DESCRIPTION:

The recurrence of Clostridium difficile infection (CDI) is one of the most difficult and increasingly common challenges associated with the infection. An initial incidence of CDI is followed by a relapse within 30 days in about 20 – 30 % of cases, and the risk of recurrence doubles after two or more occurrences. Older age, intercurrent antibiotic use for non- *C. difficile* indications, renal insufficiency, immune deficiency and antacid medications are some of the known risk factors for recurrence. The presence of just three clinical criteria: age greater than 65 years, severe disease, and continued use of antibiotics after treating the initial CDI episode, are predictive of an almost 90 % relapse rate. It is now recognized that the presence of normal, healthy, intestinal microbiota offers protection against CDI. Conversely, severe disruption of normal intestinal microbiota by repeated cycles of antibiotics, including metronidazole and vancomycin that are used to treat CDI, is likely one of the major reason for its recurrence.

Fecal bacteriotherapy, also known as fecal microbiota therapy and fecal transplantation, involves restoration of normal bowel flora by introducing bacterial flora by the infusion of a stool preparation obtained from of a healthy stool donor, who in most instances is a close relative. Fecal bacteriotherapy involves single to multiple infusions and can be carried out via different routes such as nasogastric tube, enema, or more commonly by through a colonoscope. The proposed benefits of fecal bacteriotherapy include the restoration of the colonic flora to its natural state by replacing the missing Bacteroidetes and Firmicutes species, the eradication of *C. difficile*, and the resolution of the debilitating clinical symptoms such as diarrhea, cramping and urgency.

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The principal potential risk associated with fecal bacteriotherapy is transmission of contagious agents contained in the donor stool. There are risks of transmitting agents that do not cause a disease immediately after transplantation, but may complicate the treatment of the patient in the future. The fecal transplant material needs to be prepared and administered in a clinic or hospital environment to ensure that necessary precautions are followed and the donor stool must be appropriately screened for infectious diseases and pathogens.

RATIONALE:

Based on the outcomes published from case series/case reports, and one randomized controlled trial, fecal bacteriotherapy is a highly effective therapy for refractory, recurrent C Difficile infection when standard treatments have failed. Overall, fecal bacteriotherapy resulted in resolution for 92% of patients (89% after a single treatment). Safety-wise, relapses and deaths after fecal bacteriotherapy were relatively uncommon; however, longer-term outcomes are needed to ensure these complication rates do not increase. Fecal bacteriotherapy as a first line therapy for C Difficile infection as not been studied sufficiently as the participants in published studies thus far have been patient who have failed multiple antibiotic regimens.

CODES: Number Description

Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.

CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.

Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.

CPT: 44705 Preparation of fecal microbiota for instillation, including assessment of donor specimen

HCPCS: G0455 Preparation with instillation of fecal microbiota by any method, including assessment of donor specimen

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ICD9: 008.45 Clostridium difficile

ICD10: A04.7 Enterocolitis due to Clostridium

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* key article

KEY WORDS:

Fecal microbiota therapy (FMT), Fecal transfusion, Fecal transplant, Human probiotic infusion (HPI), Intestinal microbiota Transplantation (IMT), Microbiome, Stool transplant

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

Based upon our review, fecal bacteriotherapy is not addressed in National or regional CMS coverage determinations or policies.