



CIGNA MEDICAL COVERAGE POLICY

The following Coverage Policy applies to all health benefit plans administered by CIGNA Companies including plans formerly administered by Great-West Healthcare, which is now a part of CIGNA.

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Subject Defecography

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INSTRUCTIONS FOR USE

Coverage Policies are intended to provide guidance in interpreting certain **standard** CIGNA HealthCare benefit plans. Please note, the terms of a customer's particular benefit plan document [Group Service Agreement (GSA), Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a customer's benefit plan document **always supercedes** the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. Proprietary information of CIGNA. Copyright ©2011 CIGNA

Coverage Policy

CIGNA covers conventional fluoroscopic defecography as medically necessary for individuals with intractable constipation in whom ANY of the following conditions are suspected as the cause of impaired defecation:

- inappropriate contraction of the puborectalis muscle
- enterocele (e.g., after hysterectomy)
- anterior rectocele (e.g., history of manipulation of the rectal wall per vagina)

CIGNA does not cover magnetic resonance (MR) defecography for any indication because it is considered experimental, investigational or unproven.

General Background

Defecography is a radiographic examination of the anorectal area following infusion of barium into the rectum. The study provides pelvic dynamic measurements during evacuation and consequently provides a basis for diagnosing functional disorders. Defecography is performed by using conventional radiotherapy. Although magnetic resonance (MR) imaging defecography has been proposed as a diagnostic tool for constipation, there is insufficient evidence to support the clinical utility of this radiographic study.

Constipation is defined as having a bowel movement less than three times a week. Intractable constipation can lead to progressive fecal retention, fecal incontinence, and distension of the rectum and sigmoid colon with loss of rectal sensory and motor function. The etiology of constipation includes lack of coordination of the pelvic muscles (e.g., inappropriate contraction of the puborectalis muscle) and structural abnormalities, such as enterocele (e.g., following a hysterectomy) or anterior rectocele (e.g., following manipulation of the rectal wall per the vagina). Following physical examination, the diagnostic work-up of constipation may involve studies such as barium enema, sigmoidoscopy, colonoscopy, manometry, rectal balloon expulsion, and/or conventional fluoroscopic defecography (National Digestive Diseases Information Clearinghouse [NDDIC], 2007; Bharucha, 2006; Hsieh, 2005; American Gastroenterological Association [AGA], 2009).

Conventional Fluoroscopic Defecography

Conventional fluoroscopic defecography, also referred to as defecography, dynamic defecography, cinedefecography, proctography, evacuation proctography, and dynamic proctography, is an established radiological study that produces an anatomic depiction of the changes that occur in the rectum and anal canal during defecation. The reported accuracy of conventional defecography has varied based on the condition being studied. The diagnosis of causative or associated anatomical abnormalities, especially in the identification of small rectoceles and intussusceptions in asymptomatic patients, has ranged from 25%–92%. For the diagnosis of nonrelaxing puborectalis syndrome, a sensitivity of 70%, specificity of 80%, and positive and negative predictive values of 66 and 82%, respectively have been reported (Jorge, et al., 2001).

Literature Review: Evidence in the published peer-reviewed scientific literature supports conventional defecography for the evaluation of intractable constipation. Systematic reviews (Roa, et al., 2005), case series (Roovers, et al., 2005; Savoye-Collet, et al., 2005), and comparative studies (Groenendijk, et al., 2009; Groenendijk, et al., 2008; Rao, 2004) reported that defecography provides useful information regarding anatomical and functional changes of the anorectum and aids in the diagnosis of multiple conditions associated with constipation (e.g., vaginal prolapse, perineal descent, sphincter defect, rectocele, intussusception, rectal prolapse, vaginal vault prolapse).

Magnetic Resonance (MR) Defecography

Compared to conventional fluoroscopic defecography, MR defecography, also called dynamic magnetic resonance imaging (MRI) of defecation, dynamic pelvic MRI, and dynamic MR proctography, provides a global view of the pelvic floor muscles and soft tissue. Proposed advantages of MR defecography compared to conventional defecography include the following: allows assessment and differentiation of surrounding structures (e.g., prostate, vagina, bladder, small intestines) and spaces without the use of additional contrast; allows direct visualization of the muscles, especially the levator ani and its iliococcygeal and puborectalis portions; and allows characterization and grading of abnormalities (e.g., enteroceles, rectoceles). Conventional defecography involves exposure to harmful ionization, and MR defecography avoids this exposure (Savoye-Collet, et al., 2008; Dann, 2008; Hetzer, et al., 2006; Roos, et al., 2002).

There is a lack of consensus regarding the optimal method of performing MR defecography, including proper positioning, contrast agent administration, type of contrast agent, placement of vaginal markers, placement of urethral catheters, maneuvers and imaging planes (Cortes, et al., 2004; Roos, et al., 2002).

Literature Review: The evidence in the published peer-reviewed literature does not support MR defecography for the evaluation of patients with fecal incontinence, constipation, enterocele, and/or pelvic floor disorders. Studies comparing the clinical utility of MR defecography to conventional fluoroscopic defecography and other diagnostic tests are lacking. The ideal subset of individuals who would benefit from MR defecography has not been identified. The published studies included nonrandomized comparative studies, case series, and retrospective reviews with small, heterogeneous patient populations. Outcomes varied and indicated that MR defecography could assist in differential diagnosis and determination of appropriate surgical intervention or that it was not useful. One study (n=10) reported a 70% sensitivity for MR defecography compared to conventional defecography (sensitivity 100%) in patients with rectal intussusception and proposed that MR defecography be used as an adjunct to conventional defecography (Dvorkin, et al., 2004).

Beer-Gabel et al. (2008) conducted a study comparing the results of dynamic evacuation proctography (DEP) to dynamic transperineal ultrasonography (DTP-US) in 62 women with chronic symptoms of obstructed defecation. All women had undergone a prior surgical procedure. Clinical examination, anorectal manometry, DEP and

DTP-US were performed on all subjects. The studies were performed to diagnosis cul-de-sac hernias (i.e., hernias of the pouch of Douglas including enterocele and peritoneocele). In regards to sensitivity, cul-de-sac hernia (n=17) was diagnosed by DTP-US in 82% of the women and 88% were diagnosed by DEP. In four cases when cul-de-sac hernia was diagnosed by both methods, a more advanced grade of enterocele was shown by DTP-US. In two additional cases, DTP-US showed an enterocele as opposed to a peritoneocele. DTP-US failed to diagnose two enteroceles and one peritoneocele reported by other techniques. One enterocele and one sigmoidocele diagnosed by DTP-US was missed by DEP. DEP identified one rectocele (8%), no cystoceles, five descending perineums (29%), and one rectal prolapse (25%) compared to three (24%), 11 (100%), three (18%) and one (25%) diagnosed by DTP-US, respectively. Both methods provided accuracy in diagnosing cul-de-sac hernia with sonography more readily diagnosing the presence of peritoneocele and the grades of enteroceles. The authors noted that the advantages of ultrasound included its simplicity, availability, and lack of radiation exposure. An author-noted limitation of the study was the absence of operative enterocele comparison to provide true calculation of diagnostic sensitivities. The small patient population was another limitation of the study.

Professional Societies/Organizations

American College of Gastroenterology (ACG): The ACG practice guidelines on fecal incontinence (Rao, 2004) stated that conventional defecography is “useful in patients with suspected rectal prolapse or in those with poor rectal evacuation, but it is otherwise of limited value”. They also stated that MR defecography may define the anorectal anatomy more precisely, but comparative studies are needed to determine clinical utility and how the study would influence treatment decisions.

American Society of Colon and Rectal Surgeons (ASCRS): In their guidelines for the evaluation and management of constipation (Ternent, et al., 2007), the ASCRS stated that conventional defecography “is probably the most useful technique for identifying internal rectal intussusception” and may be useful in detecting structural causes (e.g., rectocele with retained stool, pelvic dyssynergia, extent of rectal emptying) in the presence of obstructed defecation. Lack of rectocele emptying on conventional defecography is listed as one of the indications for surgical repair of rectocele.

American Gastroenterological Association (AGA): In their medical position statement on anorectal testing, the AGA (1999) proposed that conventional defecography is of potential value in patients with constipation when the following problems are suspected as the underlying cause of impaired defecation:

- inappropriate contraction of the puborectalis muscle
- enterocele (e.g., after hysterectomy)
- anterior rectocele (e.g., history of manipulation of the rectal wall per vagina)

Summary

The published peer-reviewed scientific literature and professional societies support conventional fluoroscopic defecography as one of several diagnostic tools that may be used for the evaluation of patients with intractable constipation secondary to puborectalis muscle dysfunction, enterocele and/or anterior rectocele.

The evidence in the published peer-reviewed literature is insufficient to support magnetic resonance (MR) defecography. Studies comparing the clinical utility of MR defecography to conventional fluoroscopic defecography and other diagnostic tests are lacking. The ideal subset of individuals who would benefit from MR defecography has not been identified.

Coding/Billing Information

Note: This list of codes may not be all-inclusive.

Covered when medically necessary and used to report conventional fluoroscopic defecography:

CPT®* Codes	Description
74270	Radiologic examination, colon; barium enema, with or without KUB

76496	Unlisted fluoroscopic procedure (eg, diagnostic, interventional)
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ICD-9-CM Diagnosis Codes	Description
560.0	Intussusception
564.00-564.09	Constipation
569.1	Rectal prolapse
618.00	Unspecified prolapse of vaginal walls
618.04	Rectocele without mention of uterine prolapse
618.09	Other prolapse of vaginal walls without mention of uterine prolapse
618.5	Prolapse of vaginal vault after hysterectomy
618.6	Vaginal enterocele, congenital or acquired

Experimental, investigational, unproven and not covered when used to report Magnetic Resonance defecography for any indication:

CPT ^{®*} Codes	Description
76498	Unlisted magnetic resonance procedure (eg, diagnostic, interventional)

ICD-9-CM Diagnosis Codes	Description
	All codes

***Current Procedural Terminology (CPT[®]) ©2010 American Medical Association: Chicago, IL.**

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Policy History

Pre-Merger Organizations	Last Review Date	Policy Number	Title
CIGNA HealthCare	12/15/2006	0247	Defecography

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