THE OHIO STATE UNIVERSITY
HEALTH PLAN

Subject: Evaluation of Recurrent Pregnancy Loss Policy

Effective Date: 04/2016
Review Date: 07/2018

DESCRIPTION

Clinically recognized pregnancy loss is common, occurring in approximately 15-25% of pregnancies. The majority of sporadic losses before 10 weeks' gestation result from random numeric chromosome errors, specifically, trisomy, monosomy, and polyploidy. In contrast, recurrent pregnancy loss (RPL) is a distinct disorder defined by two or more failed chemical pregnancies. It is estimated that fewer than 5% of women will experience two consecutive miscarriages, and only 1% experience three or more.

The challenge for clinicians is to differentiate sporadic miscarriage from RPL. Self-reported losses by patients may not be accurate. For the purposes of determining whether evaluation for RPL is appropriate, pregnancy is defined as a clinical pregnancy documented by ultrasonography or histopathological examination. Ideally, a threshold of three or more losses should be used for epidemiological studies while clinical evaluation may proceed following two first-trimester pregnancy losses.

INDICATIONS FOR NURSE APPROVAL

The OSU Health Plan considers the following tests medically necessary for the evaluation of members with recurrent pregnancy loss (defined as two or more consecutive spontaneous abortions):

- Karyotypic analysis of the parents to detect any balanced structural chromosomal abnormalities
- Screening for lupus anticoagulant, anticardiolipin antibodies (IgG and IgM), and anti-β_2 glycoprotein I, for diagnosis of antiphospholipid syndrome
- Karyotypic analysis of products of conception
- Diagnostic evaluation for uterine anatomic anomalies:
    - Sonohysterogram, hysterosalpingogram, and/or hysteroscopy
    - Ultrasound
    - MRI
- Pelvic ultrasound
- Screening for thyroid or prolactin abnormalities
- Genetic counseling for cases of RPL associated with parental chromosomal abnormalities

EXCLUSIONS

The OSU Health Plan considers the following tests experimental and investigation for the evaluation of members with recurrent pregnancy loss:

- Routine testing of women with RPL for inherited thrombophilias (specifically, factor V Leiden and the prothrombin gene mutations, protein C, protein S, and antithrombin deficiencies)
- Endometrial biopsy for diagnosis of a luteal phase defect

- Testing for spermploidy (e.g., fluorescence in situ hybridization [FISH]) or DNA fragmentation
- Alloimmune factors (e.g., human leukocyte antigen [HLA] typing, embryo-toxic factors, decidual cytokine profiles, blocking or anti-paternal antibody levels, HLA-G polymorphism)
- Antinuclear antibody (ANA)
- Methylene tetrahydrofolate reductase (MTHFR) testing

RELATED CPT/HCPC CODES

CPT codes covered if selection criteria are met:	
58340	Catheterization and introduction of saline or contrast material for saline infusion sonohysterography (SIS) or hysterosalpingography
58555 - 58563	Hysteroscopy, diagnostic or surgical
74740	Hysterosalpingography, radiological supervision and interpretation
76831	Saline infusion sonohysterography (SIS), including color flow Doppler, when performed
76856 - 76857	Ultrasound, pelvic (non-obstetric)
81402 - 81408	Molecular pathology
83890 - 83914	Molecular diagnostics [not covered for preimplantation genetic screening]
84443	Thyroid stimulating hormone (TSH)
85335	Factor inhibitor test
86146	Beta 2 Glycoprotein I antibody, each [IgG or IgM]
86147	Cardiolipin (phospholipid) antibody, each Ig class
88230 - 88239	Tissue culture
88245 - 88269	Chromosome analysis for breakage syndromes [not covered for preimplantation genetic screening]
88271 - 88275	Molecular cytogenetics [not covered for preimplantation genetic screening]
88280 - 88289	Chromosome analysis (additional karyotypes, specialized banding techniques, cells counted, high resolution study) [not covered for preimplantation genetic screening]
88291	Cytogenetics and molecular cytogenetics, interpretation and report [not covered for preimplantation genetic screening]

CPT codes not covered for indications listed in this policy:	
81228	Cytogenomic constitutional (genome-wide) microarray analysis; interrogation of genomic regions for copy number variants (eg, bacterial artificial chromosome [BAC] or oligo-based comparative genomic hybridization [CGH] microarray analysis)
81229	Cytogenomic constitutional (genome-wide) microarray analysis; interrogation of genomic regions for copy number and single nucleotide polymorphism (SNP) variants for chromosomal abnormalities
81240	F2 (prothrombin, coagulation factor II) (eg, hereditary hypercoagulability) gene analysis, 20210G>A variant
81241	F5 (coagulation factor V) (eg, hereditary hypercoagulability) gene analysis, Leiden variant
81291	MTHFR (5,10-methylenetetrahydrofolate reductase) (eg, hereditary hypercoagulability) gene analysis, common variants (eg, 677T, 1298C)

81400	Molecular pathology procedure, Level 1(eg, identification of single germline variant [eg, SNP] by techniques such as restriction enzyme digestion or melt curve analysis) [angiotensin converting enzyme (ACE) gene polymorphisms testing], [plasminogen activator inhibitor-1 (PAI-1) gene polymorphisms testing]
81401	Molecular pathology procedure, Level 2 (eg, 2-10 SNPs, 1 methylated variant, or 1 somatic variant [typically using nonsequencing target variant analysis], or detection of a dynamic mutation disorder/triplet repeat) [highly skewed X- inactivation patterns]
83090	Homocysteine
83520	Immunoassay for analyte other than infectious agent antibody or infectious agent antigen; quantitative, not otherwise specified[cytokine polymorphisms analysis (Th1/Th2 intra-cellular cytokine ratio]
85302 - 85306	Clotting inhibitors or anticoagulants; protein C and protein S
86021	Antibody identification; leukocyte antibodies
86148	Ant-phosphatidylserine (phospholipid) antibody
86357	Natural killer (NK) cells, total count
86812 - 86817	HLA typing
86825	Human leukocyte antigen (HLA) crossmatch, non-cytotoxic (eg, using flow cytometry); first serum sample or dilution
86826	each additional serum sample or sample dilution
88142	Cytopathology, cervical or vaginal (any reporting system), collected in preservative fluid, automated thin layer preparation; manual screening under physician supervision [reproductive immunophenotype CD3+, CD4+, CD5+, CD8+, CD16+, CD19+, CD56+]
88189	Flow cytometry, cell cycle or DNA analysis [reproductive immunophenotype CD3+, CD4+, CD5+, CD8+, CD16+, CD19+, CD56+]
89290 - 89291	Biopsy, oocyte polar body or embryo blastomere, microtechnique (for pre-implantation genetic diagnosis); less than, equal to, or greater than 5 embryos [for recurrent pregnancy loss]

REFERENCES

American Congress of Obstetricians and Gynecologists. (2001). Management of recurrent early pregnancy loss. International Journal of Gynecology & Obstetrics, 78, 179-90.

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