



Subject: **Recurrent Pregnancy Loss (RPL) – Diagnostic***

Effective Date: **March 27, 2007**

Department(s): **Utilization Management**

Policy: Diagnostic testing as delineated below, in the evaluation of patients with RPL (defined as ≥ 2 consecutive spontaneous abortions [ICD-9 646.33; ICD-10 O26.20-O26.23]) is reimbursable under Plans administered by QualCare, Inc.

Objective: To assure proper and consistent reimbursement and to enumerate tests covered in patients with RPL.

Procedure:

1. Diagnostic tests reimbursable in the evaluation of non-genetic causes of RPL include, but are not limited to, the following:

- a) Pelvic ultrasound (CPT 76830, 76856)
- b) Hysteroscopy (CPT 58555)
- c) Hysterosalpingography (CPT 74740)
- d) Sonohysterography (CPT 76831)
- e) Pelvic MRI (CPT 72197) when ultrasound shows a complex anomaly or is inconclusive
- f) Endometrial biopsy (CPT 58558)
- g) Testing for lupus anticoagulant
- h) Testing for anticardiolipin antibody/ Beta 2 Glycoprotein 1 antibody (IgG and/or IgM) (CPT 86146, 86147) (antiphospholipid antibodies)

- i) Thyroid function testing, including, but not limited to, antithyroid antibodies (**CPT 86376**) and TSH (**CPT 84443**)
 - j) Testing for diabetes mellitus
2. Diagnostic tests reimbursable in the evaluation of genetic causes of RPL include, but are not limited to, the following:
- a. Pre- and post-test genetic counseling.
 - b. Peripheral blood karyotyping (**CPT 88230, 88233, 88248, 88261, 88262, 88263, 88267, 88269, 88280, 88283, 88285**) of the parents.
 - c. Karyotype of the products of conception (see CPT codes above) When karyotyping is unsuccessful or not possible due to sample condition, chromosomal microarray testing (**CPT 81228, 81229**) may be considered medically necessary.
 - d. Testing for Factor V Leiden and prothrombin gene mutations (**CPT 81240, 81241**).
3. The following are deemed investigational and not reimbursable in the evaluation of patients with RPL:
- a. Lymphocyte subset assays
 - b. Flow cytometry assays for maternal antibodies to paternal leukocytes
 - c. Assays for embryocytotoxicity
 - d. Anti-leukocyte antibody detection assays
 - e. HLA tissue typing of each parent
 - f. Testing for methylene tetrahydrofolate reductase (MTHFR) (**CPT 81291**) mutations
 - g. Chromosomal microarray testing (**CPT 81228, 81229**) for routine evaluation, when karyotyping is available.

References

Budden A, Abbott JA. The Diagnosis and Surgical Approach of Uterine Septa. J Minim Invasive Gynecol. 2018 Feb;25(2):209-217

El Hachem H, Crepaux V, May-Panloup P, Descamps P, Legendre G, Bouet PE. Recurrent pregnancy loss: current perspectives. Int J Womens Health. 2017;9:331-345(May)

Lockwood CJ, Eckler K, Eds. UpToDate-Evaluation of couples with recurrent pregnancy loss. Version 29.0. Updated November 22, 2017. Accessed at uptodate.com

CONFIDENTIAL-NOT FOR DISTRIBUTION OUTSIDE OF QUALCARE

Grimstad F, Kreig S. Immunogenetic contributions to recurrent pregnancy loss. *J Assist Reprod Genet.* 2016 May 12 [Epub ahead of print]

Hickey, SE, Curry CJ, Toriello HV. ACMG practice guidelines: lack of evidence for MTHFR polymorphism testing. *Genet Med.* 2013;15(2):153-6(Feb)

Grody WW, Griffin JH, Taylor AK, Korf BR. American College of Medical Genetics Consensus statement on Factor V Leiden Mutation testing. Accessed at ACMG.net on August 23, 2013.

Practice Committee of the American Society for Reproductive Medicine. Evaluation and treatment of recurrent pregnancy loss. *Fertil Steril.* 2012;98(5):1103-11(Nov)

Daher S, Mattar R, Gueuvoghianian-Silva B, Torioni MR. Genetic polymorphisms and recurrent spontaneous abortions: an overview of current knowledge. *Am J reprod Immunol* 2012;67(4):341-7(Apr)

Dahl M, Hviid T. Human leukocyte antigen class Ib molecules in early pregnancy success and early pregnancy loss. *Human Reproduction Update* 2012;18(1):92-109(Jan-Feb)

ACOG technology assessment no. 8: Sonohysterography. *Obstet Gynecol.* 2012;119(6):1325(Jun)

Jaslow CR, Carney JL, Kutteh WH. Diagnostic factors identified in 1020 women with two versus three or more recurrent pregnancy losses. *Fertil Steril* 2009; (Mar 30) Epub ahead of print

Ford HB, Schust DJ. Recurrent Pregnancy Loss: Etiology, Diagnosis, and Therapy. *Rev Obstet Gynecol* 2009;2(2):76-83 (spring)

Pabinger I. Thrombophilia and its impact on pregnancy. *Thromb Res* 2009;123(Suppl 3):S16-S21

Tulandi T, Al-Fozan HM. Evaluation of couples with recurrent pregnancy loss. *UpToDate* v 17.1, October 28, 2008. available at www.uptodate.com/online/topic.do?topicKey=gen_gyne/21713&view=print accessed 07/23/09

Tulandi T, Al-Fozan HM. Management of couples with recurrent pregnancy loss. *UpToDate* v 17.1, December 2, 2008. available at www.uptodate.com/online/topic.do?topicKey=gen_gyne/24083&view=print accessed 07/23/09

Dendrinou S, Grigoriou O, Sakkas EG, *et al.* Hysteroscopy in the evaluation of habitual abortions. *Eur J Contracept Reprod Health Care* 2008;13(2):198-200 (Jun)

Tulandi T, Al-Fozan HM. Evaluation and management of couples with recurrent pregnancy loss. *UpToDate* v 14.3, September 15, 2006. available at www.utdol.com/utd/content/topic.do?topicKey=gen_gyne/21713&view=print accessed 02/18/07.

Katz VL. Recurrent Miscarriage. in Spontaneous and Recurrent Abortion: Etiology, Diagnosis, Treatment. Ch 16 in Katz VL, Lentz GM, Lobo RA, *et al.* *Comprehensive Gynecology.* 5th ed. Philadelphia. Mosby Elsevier. 2007

Kiwi R. Recurrent pregnancy loss: Evaluation and discussion of the causes and their management. *Cleve Clin J Med* 2006;73(10):913-921 (Oct)

Guimares Filho HA, Mattar R, Pires CR, *et al.* Comparison of hysterosalpingography, hysterosonography and hysteroscopy in evaluation of the uterine cavity in patients with recurrent pregnancy losses. *Arch Gynecol Obstet* 2006;274(5):284-288 (Aug)

Christiansen OB. Evidence-based investigations and treatments of recurrent pregnancy loss. *Curr Opin Obstet Gynecol* 2006;18(3):304-312 (Jun)

Stephenson MD, Sierra S. Reproductive outcomes in recurrent pregnancy loss associated with a parental carrier of a structural chromosome rearrangement. *Hum Reprod* 2006;21(4):1076-1082 (Apr)

Arredondo F, Noble LS. Endocrinology of recurrent pregnancy loss. *Semin Reprod Med* 2006;24(1): 33-39 (Feb)

Sierra S, Stephenson M. Genetics of recurrent pregnancy loss. *Semin Reprod Med* 2006;24(1): 17-24 (Feb)

Davi Wold AS, Pham N, Arici A. Anatomic factors in recurrent pregnancy loss. *Semin Reprod Med* 2006;24(1): 25-32 (Feb)

Christiansen OB, Nybo Andersen AM, Bosch E, *et al.* Evidence-based investigations and treatments of recurrent pregnancy loss. *Fertil Steril* 2005;83(4):821-839 (Apr)

Ventolini G, Zhang M, Gruber J. Hysteroscopy in the evaluation of patients with recurrent pregnancy loss: a cohort study in a primary care population. *Surg Endosc* 2004;18(12):1782-1784 (Dec)

Kovalevsky G, Gracia Cr, Berlin JA, *et al.* Evaluation of the association between hereditary thrombophilias and recurrent pregnancy loss : a meta-analysis. *Arch Intern Med* 2004;164(5):558-563 (Mar)

Simpson JL. Fetal Wastage. Ch 22 in Gabbe ST, Niebyl JR, Simpson JL. *Obstetrics: Normal and Problem Pregnancies*. Philadelphia. Churchill Livingstone. 2002.

Drafted By/Date: B. Fisher, MD 02/18/07
Approved By/Date: QM Committee 03/27/07
Revised By/Date: B. Fisher, MD 07/24/09
Approved By/Date: QM Committee 09/08/09
Revised By/Date: M. McNeil, MD 08/23/13
Approved By/Date: QM Committee 09/10/13
Revised By/Date: M. McNeil, MD 06/13/16
Approved By/Date: QM Committee 08/23/16
Revised By/Date: M McNeil, MD 06/13/18
Approved By/Date: QM Committee 08/21/18

*Consistent with Summary Plan Description (SPD). When there is discordance between this policy and the SPD, the provisions of the SPD prevail.

