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DISCLAIMER

This Molina Clinical Policy (MCP) is intended to facilitate the Utilization Management process. Policies are not a supplementation or recommendation for treatment; Providers are solely responsible for the diagnosis, treatment and clinical recommendations for the Member. It expresses Molina's determination as to whether certain services or supplies are medically necessary, experimental, investigational, or cosmetic for purposes of determining appropriateness of payment. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered (e.g., will be paid for by Molina) for a particular Member. The Member's benefit plan determines coverage – each benefit plan defines which services are covered, which are excluded, and which are subject to dollar caps or other limits. Members and their Providers will need to consult the Member's benefit plan to determine if there are any exclusion(s) or other benefit limitations applicable to this service or supply. If there is a discrepancy between this policy and a Member's plan of benefits, the benefits plan will govern. In addition, coverage may be mandated by applicable legal requirements of a State, the Federal government or CMS for Medicare and Medicaid Members. CMS's Coverage Database can be found on the CMS website. The coverage directive(s) and criteria from an existing National Coverage Determination (NCD) or Local Coverage Determination (LCD) will supersede the contents of this MCP and provide the directive for all Medicare members. References included were accurate at the time of policy approval and publication.

OVERVIEW

Sterilization is a method of permanently preventing pregnancy by rendering the patient infertile. In women, sterilization is generally performed by tubal ligation or occlusion. In tubal sterilization, the fallopian tubes are cut and tied with special thread, closed shut with bands or clips, sealed with an electric current, or blocked with scar tissue formed by small implants. Tubal sterilization prevents the sperm from reaching the egg. Tubal sterilization can be performed with a minilaparotomy, with laparoscopy, or with hysteroscopy. Salpingectomy refers to the surgical removal of a Fallopian tube and can be performed with laparotomy or laparoscopy.

COVERAGE POLICY

Please check individual state health plan regulations and benefit contracts before applying this MCP. Coverage of female sterilization is applicable to individual State and Federal Health Plan Medicaid regulations and benefit contracts that supersede this policy. All State and Federal Health Plan eligibility requirements including any applicable consent forms must be met and completed.

Medicare **does not cover** sterilization procedures unless it is medically necessary for the treatment of an illness or injury.

Bilateral Salpingectomy for female sterilization **is considered medically necessary** as an alternative to tubal ligation or occlusion of the fallopian tubes procedures in members who are 21 years of age and older.

DOCUMENTATION REQUIREMENTS. Molina Healthcare reserves the right to require that additional documentation be made available as part of its coverage determination; quality improvement; and fraud; waste and abuse prevention processes. Documentation required may include, but is not limited to, patient records, test results and credentials of the provider ordering or performing a drug or service. Molina Healthcare may deny reimbursement or take additional appropriate action if the documentation provided does not support the initial determination that the drugs or services were medically necessary, not investigational or experimental, and otherwise within the scope of benefits afforded to the member, and/or the documentation demonstrates a pattern of billing or other practice that is inappropriate or excessive.

SUMMARY OF MEDICAL EVIDENCE

There is a moderate-sized body of evidence regarding salpingectomy for sterilization including randomized controlled trials, 3-4 a Cochrane review, 2 retrospective, comparative and cohort studies. The published evidence is sufficient and generally supports salpingectomy has a means of permanent sterilization in women and is a safe and effective procedure.

A 2016 Cochrane Review compared the different tubal occlusion techniques in terms of major and minor morbidity, failure rates (pregnancies), technical failures and difficulties, and women's and surgeons' satisfaction (Lawrie et al. 2016). All RCTs comparing different techniques for tubal sterilization, irrespective of the route of fallopian tube access or the method of anesthesia were reviewed. 19 RCTs involving 13,209 women were included. Most studies concerned

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interval sterilization; three RCTs involving 1632 women, concerned postpartum sterilization. Comparisons included tubal rings versus clips (six RCTs, 4232 women); partial salpingectomy versus electrocoagulation (three RCTs, 2019 women); tubal rings versus electrocoagulation (two RCTs, 599 women); partial salpingectomy versus clips (four RCTs, 3627 women); clips versus electrocoagulation (two RCTs, 206 women); and Hulka versus Filshie clips (two RCTs, 2326 women). RCTs of clips versus electrocoagulation contributed no data to the review. One year after sterilization, failure rates were low (< 5/1000) for all methods. There were no deaths reported with any method, and major morbidity related to the occlusion technique was rare. Minor morbidity was higher with the tubal ring than the clip as were technical failures. Major morbidity was significantly higher with the modified Pomeroy technique than electrocoagulation, as was postoperative pain. When tubal rings were compared with electrocoagulation, postoperative pain was reported significantly more frequently for tubal rings. When partial salpingectomy was compared with clips, there were no major morbidity events in either group. The frequency of minor morbidity was low and not significantly different between groups. Although technical failure occurred more frequently with clips, operative time was shorter with clips than partial salpingectomy. We found little evidence concerning women's or surgeon's satisfaction. No RCTs compared tubal microinserts (hysteroscopic sterilization) or chemical inserts (quinacrine) to other methods. The review concluded that tubal sterilization by partial salpingectomy, electrocoagulation, or using clips or rings, is a safe and effective method of contraception. Failure rates at 12 months post-sterilization and major morbidity are rare outcomes with any of these techniques. Minor complications and technical failures appear to be more common with rings than clips. Electrocoagulation may be associated with less postoperative pain than the modified Pomerov or tubal ring methods. Further research should include RCTs (for effectiveness) and controlled observational studies (for adverse effects) on sterilization by minimally-invasive methods, (i.e., tubal inserts and quinacrine).

Ganer et al. (2017) compared short-term ovarian reserve and operative complications in cases of salpingectomy and tubal ligation during cesarean section. Study patients who underwent elective cesarean section at our institution and requested sterilization were randomized to bilateral salpingectomy or tubal ligation. Prior to surgery, blood samples were obtained for antimullerian hormone. Surgical course was noted, including overall time, complications, and postoperative hemoglobin. Repeat antimullerian hormone samples were obtained from patients 6-8 weeks following surgery. In all, 46 patients were recruited for participation, of whom 33 completed a follow-up visit, and for whom repeat antimullerian hormone levels were available. Patients in the salpingectomy group were slightly older (37.0 +/- 3.9 vs 34.3 +/- 4.1 years, P =0.02). No differences were noted in patient parity, body mass index, or gestational age between the groups. Pregnancy and post-delivery antimullerian hormone levels were not significantly different between the groups, with an average increase of 0.58 +/- 0.98 vs 0.39 +/- 0.41 ng/mL in the salpingectomy and tubal ligation groups, respectively (P =0.45). Surgeries including salpingectomy were longer by an average 13 minutes (66.0 +/- 20.5 vs 52.3 +/- 15.8 minutes, P =0.01). No difference was demonstrated between the groups regarding surgical complications and postoperative hemoglobin decrease. The authors concluded that sterilization by salpingectomy appears to be as safe as tubal ligation regarding operative complications and subsequent ovarian reserve. As salpingectomy offers the advantage of cancer risk reduction, it may be offered in the settings of elective preplanned surgeries.

Venturella et al. (2015) studied the effects of the wide excision of soft tissues adjacent to the ovary and fallopian tube on ovarian function and surgical outcomes in women undergoing laparoscopic bilateral prophylactic salpingectomy. One hundred eighty-six women were randomly divided into two groups. In group A (n = 91), standard salpingectomy was performed. In group B (n = 95), the mesosalpinx was removed within the tubes. Prior to and 3 months after surgery, antimullerian hormone (AMH), FSH, three-dimensional antral follicle count (AFC), vascular index (VI), flow index (FI), vascular-flow index (VFI), and OvAge were recorded for each patient. Ovarian reserve modification (Delta) before and after surgery was assessed as the primary outcome. Operative time, variation of the hemoglobin level (DeltaHb), postoperative hospital stays, postoperative return to normal activity, and complication rate were assessed as secondary outcomes. The results showed no significant difference between groups for DeltaAMH, DeltaFSH, DeltaAFC, DeltaVI, DeltaFI, DeltaVFI, and DeltaOvAge. Moreover, the groups were similar for operative time, DeltaHb, postoperative hospital stay, postoperative return to normal activity, and complication rate. In conclusion, even when the surgical excision includes the removal of the mesosalpinx, salpingectomy does not damage the ovarian reserve. Moreover, wide salpingectomy with excision of the mesosalpinx did not alter blood loss, hospitalization stay, or return to normal activities.

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National and Specialty Organizations

American College of Obstetricians and Gynecologists (ACOG 2016) supports the following recommendations and conclusions based on the current understanding of ovarian carcinogenesis and the safety of salpingectomy:

- The surgeon and patient should discuss the potential benefits of the removal of the fallopian tubes during a
 hysterectomy in women at population risk of ovarian cancer who are not having an oophorectomy.
- When counseling women about laparoscopic sterilization methods, clinicians can communicate that bilateral salpingectomy can be considered a method that provides effective contraception.
- Prophylactic salpingectomy may offer clinicians the opportunity to prevent ovarian cancer in their patients.
- RCTs are needed to support the validity of this approach to reduce the incidence of ovarian cancer.
- The choice of sterilization procedure should be based on the risks and benefits of the hysteroscopic and laparoscopic approaches. If a laparoscopic approach is elected, then the risks and benefits of salpingectomy should be discussed.
- Other than a significant increase in operative time for salpingectomy with hysterectomy (16 minutes) and with sterilization (10 minutes), no significant differences in length of hospital stay, readmissions, or blood transfusions have been identified in cases with and without salpingectomy

SUPPLEMENTAL INFORMATION

None.

CODING & BILLING INFORMATION

CPT Code

CPT	Description
58661	Laparoscopy, surgical; with removal of adnexal structures (partial or total oophorectomy and/or
	salpingectomy) only.

HCPCS Codes – N/A

CODING DISCLAIMER. Codes listed in this policy are for reference purposes only and may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement. Listing of a service or device code in this policy does not guarantee coverage. Coverage is determined by the benefit document. Molina adheres to Current Procedural Terminology (CPT®), a registered trademark of the American Medical Association (AMA). All CPT codes and descriptions are copyrighted by the AMA; this information is included for informational purposes only. Providers and facilities are expected to utilize industry standard coding practices for all submissions. When improper billing and coding is not followed, Molina has the right to reject/deny the claim and recover claim payment(s). Due to changing industry practices, Molina reserves the right to revise this policy as needed.

APPROVAL HISTORY

2/9/2022	Policy reviewed and updated, no changes in coverage position, updated references. New template.
2/8/2021	Policy reviewed, no changes to criteria. References updated.
4/23/2020	Policy reviewed, no changes to criteria. References updated.
9/18/2019	Policy reviewed, no changes to criteria. References updated.
7/10/2018	New Policy, IRO Peer Review: April 9, 2018, Policy reviewed by internal physician board certified in OB/GYN.

REFERENCES

Government Agency

- Centers for Disease Control and Prevention (CDC). U.S. selected practice recommendations for contraceptive use, 2016. MMWR 2016 Jul 29:65(3):1-104.
- Centers for Medicare and Medicaid Services (CMS). Medicare coverage database. National coverage determination (NCD) sterilization (230.3). Available from CMS.

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Peer Reviewed Publications

- 1. Chene G, de Rochambeau B et al. Current surgical practice of prophylactic and opportunistic salpingectomy in France. Gynecol Obstet Fertil. 2016;Jul-Aug;44(7-8):377-384.
- 2. Danis RB, Della Badia CR et al. Postpartum permanent sterilization: could bilateral salpingectomy replace bilateral tubal ligation? J Minim Invasive Gynecol. 2016;Sep-Oct;23(6):928-932.
- 3. Dilley SE, Havrilesky LJ et al. Cost-effectiveness of opportunistic salpingectomy for ovarian cancer prevention. Gynecol Oncol. 2017;Aug;146(2):373-379.
- 4. Ganer Herman H, Gluck O, Keidar R et al. Ovarian reserve following cesarean section with salpingectomy vs tubal ligation: a randomized trial. Am J Obstet Gynecol. 2017;Apr 25.
- Lawrie TA, et al. Techniques for the interruption of tubal patency for female sterilization. Cochrane Database Syst Rev. 2016 Sep 7;(9):CD003034.
- Powell CB, Alabaster A, Simmons S, et al. Salpingectomy for Sterilization: Change in Practice in a Large Integrated Health Care System, 2011-2016. Obstet Gynecol 2017; 130:961.
- 7. Shinar S, Blecher Y, Alpern S et al. Total bilateral salpingectomy versus partial bilateral salpingectomy for permanent sterilization during cesarean delivery. Arch Gynecol Obstet. 2017;295(5):1185-1189.
- 8. Venturella R, Rocca M, Lico D, Trapasso S et al. Prophylactic bilateral salpingectomy for the prevention of ovarian cancers: what is happening in Italy? Eur J Cancer Prev. 2016;25(5).
- 9. Venturella R, Morelli M, Lico D, Di Cello A et al. Wide excision of soft tissues adjacent to the ovary and fallopian tube does not impair the ovarian reserve in women undergoing prophylactic bilateral salpingectomy: results from a randomized, controlled trial. Fertil Steril. 2015;Nov;104(5):1332-1339.
- 10. Westberg J, Scott F, Creinin MD et al. Safety outcomes of female sterilization by salpingectomy and tubal occlusion. Contraception. 2017;May;95(5):505-508.
- 11. Yoon SH, Kim SN et al. Bilateral salpingectomy can reduce the risk of ovarian cancer in the general population: a meta-analysis. Eur J Cancer. 2016;Mar;55:38-46.

National and Specialty Organizations

- 1. American College of Obstetricians and Gynecologists (ACOG).
 - Salpingectomy for Ovarian Cancer Prevention. Committee Opinion. Number 620. Jan, 2015. Correction 2016. Available from ACOG.
 - Practice Bulletin No. 133, Obstetrics & Gynecology: February 2013 Volume 121 Issue 2 PART 1 p 392-404 doi: 10.1097/01.AOG.0000426425.33845.b2.

Other Peer Reviewed and Professional Organization Publications (used in the development of this policy)

- 1. Braaten K. Postpartum sterilization. Available from <u>UpToDate</u>. Updated January 18, 2022. Registration and login required.
- Hayes. Salpingectomy for primary sterilization in adults. Available from <u>Hayes</u>. Published September 2017. Archived October 2018. Registration and login required.
- 3. McAlpine JN, Hanley GE. Opportunistic salpingectomy for ovarian, fallopian tubal, and peritoneal carcinoma risk reduction. Available from <a href="https://doi.org/10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/ncbe.10.2012/

APPENDIX

Reserved for State specific information (to be provided by the individual States, not Corporate). Information includes, but is not limited to. State contract language, Medicaid criteria and other mandated criteria.