CLINICAL PRACTICE REVIEW · POSTER SESSION

Cervical stenosis in fertility care: an often-forgotten, easily missed, and easily treated contributor to infertility

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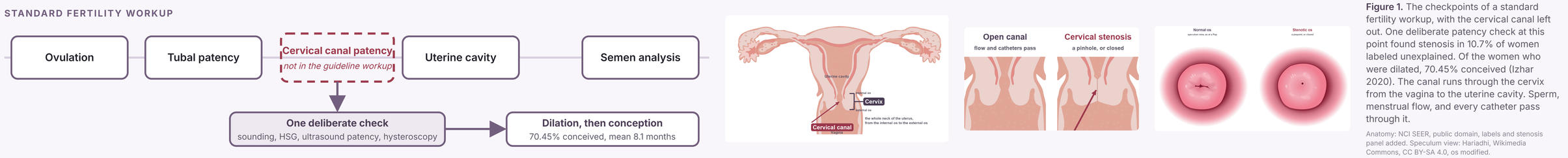


Figure 1. The checkpoints of a standard fertility workup, with the cervical canal left out. One deliberate patency check at this point found stenosis in 10.7% of women labeled unexplained. Of the women who were dilated, 70.45% conceived (Izhar 2020). The canal runs through the cervix from the vagina to the uterine cavity. Sperm, menstrual flow, and every catheter pass through it.

Anatomy: NCI SEER, public domain, labels and stenosis panel added. Speculum view: Hariadhi, Wikimedia Commons, CC BY-SA 4.0, os modified.

Why it is forgotten

The standard infertility workup checks four things: ovulation, tubal patency, the uterine cavity, and semen parameters. It does not ask whether the cervical canal is open. ESHRE and RCOG fertility-workup guidance holds no check of cervical canal patency (Izhar 2020). The 2021 ASRM committee opinion dropped the postcoital test, the old cervical-factor assay. It put no other cervical check in its place.

The default path leads toward assisted reproductive technology, which goes around the cervix rather than fixing it. **The gap sits in the guideline documents themselves.**

How it is missed

Cervical stenosis presents as infertility or dysmenorrhea, and sometimes with no symptoms at all. It impairs sperm transport, obstructs menstrual outflow, and blocks access to the endometrial cavity. Even when she feels nothing, the clue is often already in her chart. Hysterosalpingography commonly shows cervical canal narrowing as an incidental finding, not usually recorded. Difficulty passing a catheter is treated as a technical nuisance, and she is usually not told.

Izhar and colleagues found cervical stenosis in 117 of 1097 women (10.7%) carrying a label of unexplained subfertility. Prior endometriosis ($p<0.001$), prior surgery ($p<0.001$), pelvic inflammatory disease ($p=0.001$), and polyps ($p=0.004$) were associated. Every one of those women carried a label that hid a treatable cause. **Unexplained infertility is undiagnosed infertility.**

How it is found

The check has to be deliberate. Five things each contribute: history, sounding of the canal, hysterosalpingography, ultrasound check of cervical canal patency, and hysteroscopy. Izhar and colleagues set a working definition. Stenosis meant a 7 French Foley catheter would not pass during saline infusion sonography. Hysteroscopy is still the reference standard. It confirms the lesion and shows how far it runs.

Diagnosis requires only deliberate evaluation at an examination that is already happening. **The limiting step is asking the question.**

How it is treated

Treatment is staged, short, and cheap. Mechanical dilation is first-line and is done in the office, at a small fraction of the cost of going around the cervix with assisted reproduction. Hysteroscopic resection of the cervical canal addresses cases refractory to dilation or anatomically complex. Post-procedural cervical-canal maintenance, including stent placement, reduces restenosis. Preprocedural cervical preparation with ripening agents such as misoprostol, osmotic dilators, or estrogen priming is used where indicated (Vitale 2024).

In a series of 30 infertile women whose stenosis was refractory to standard dilation, hysteroscopic loop resection carried a 3.3% procedure-failure rate and a mean operative time of 18 minutes (Lin 2013). This tiered menu comes from mainstream gynecologic literature.



A helpful tool. A plastic canal dilator, Milex type, the finest size of the set. The fine taper starts a pinpoint os that standard cervical dilators cannot enter. Some surgeons use lacrimal dilators from ophthalmology the same way. Illustration by the author.

What the practice review found

Izhar and colleagues studied 1097 women with unexplained subfertility. 117 of them (10.7%) had cervical stenosis.

70.45%
CONCEIVED AFTER ULTRASOUND-GUIDED DILATION (N=89)

18.5%
CONCEIVED AMONG STENOTIC WOMEN WHO TURNED DOWN DILATION (N=28), P<0.001

Mean time to conception was 8.1 months after dilation. In controls it was 11.4 months ($p<0.001$). The women conceived on their own, with no intrauterine insemination or IVF.

The condition matters inside the assisted reproductive paradigm too. A systematic review of 15 studies found that cervical stenosis is the most common cause of difficult embryo transfer (Arora 2018). Among 605 IVF patients, 25% of those with cervical stenosis had a difficult transfer (Ou 2022).

Limits

This is a narrative review of published work, not a systematic search. The key comparative data come from one center. That study was a prospective case-control series of 89 treated women and 28 stenotic controls. It draws on published data only; no case series from the author's own practice is included. Generalizability across populations is untested.

Take-home for the clinician

- Ask whether the cervical canal is open in every fertility workup. Ask again at repeat visits.
- Treat a narrow canal noticed during hysterosalpingography, surgery, or a speculum exam as a finding. Name it as a diagnosis, or as a contributor. Let it change the workup, and monitor it over time.
- Correct the blockage before infertility is called unexplained. A deliberate check turns unexplained into diagnosed, and diagnosed into easily treated and followed.

References

1. Izhar R, Husain S, Tahir MA, Husain S. Cervical stenosis and pregnancy rate after ultrasound guided cervical dilation in women undergoing saline infusion sonography. J Ultrason. 2020;20(81):e116-e121.
2. Lin YH, Hwang JL, Huang LW, Seow KM. Efficacy of hysteroscopic cervical resection for cervical stenosis. J Minim Invasive Gynecol. 2013;20(6):836-841.
3. Vitale SG, De Angelis MC, Della Corte L, et al. Uterine cervical stenosis: from classification to advances in management. Arch Gynecol Obstet. 2024;309(3):755-764.
4. Arora P, Mishra V. Difficult embryo transfer: a systematic review. J Hum Reprod Sci. 2018;11(3):229-235.
5. Ou YC, Huang KH, Lan KC. Hysteroscopic cervical features associated with difficult embryo transfer in unselected patients undergoing in vitro fertilization. Biomed J. 2022;45(3):557-564.
6. Practice Committee of the American Society for Reproductive Medicine. Fertility evaluation of infertile women: a committee opinion. Fertil Steril. 2021;116(5):1255-1265.
7. Romualdi D, et al. (ESHRE Guideline Group on Unexplained Infertility). Evidence-based guideline: unexplained infertility. Hum Reprod. 2023;38(10):1881-1890.
8. Wood MA, Kerrigan KL, Burns MK, Glenn TL. Overcoming the challenging cervix: identification and techniques to access the uterine cavity. Obstet Gynecol Surv. 2018;73(11):641-649.

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