Choosing Wisely Canada

Fertility and Andrology

Nine Tests and Treatments to Question

by
Canadian Fertility and Andrology Society
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1 **Don't routinely perform preimplantation genetic testing for aneuploidy screening on patients undergoing IVF.**

Preimplantation genetic testing for aneuploidy (PGT-A) was developed to help select the best embryos for transfer in an in vitro fertilization (IVF) cycle by screening out aneuploidy. However, there is no improvement in live birth rate per cycle started compared with IVF alone. PGT-A adds extra cost, carries a risk of misdiagnosis, and there is no long-term data reported on childhood outcomes. Patients should be counselled on the risks and limitations of testing.

2 **Don't prescribe gonadotropins in doses of >450 units daily for controlled ovarian stimulation in IVF.**

Several studies demonstrate that the use of high doses of gonadotropins does not result in an increased number of dominant follicles recruited, mature oocytes retrieved, nor good quality embryos produced compared with lower dosing regimens. Given that there is a greater cost to the patient, with no evidence of an improved outcome, avoidance of high doses of gonadotropins is recommended.

3 Don’t routinely perform assisted hatching on fresh embryos prior to transfer.

Assisted hatching (AH) is a technique where the zona pellucida is disrupted to improve implantation and therefore live birth rates from embryos created through IVF. Although there may be a benefit to performing AH in certain patient populations, the routine use of AH for all patients undergoing a fresh embryo transfer has not been shown to improve live birth rates.

4 Don’t prescribe lymphocyte immunization therapy.

There is no improvement in live birth rate or clinical pregnancy rate with lymphocyte immunization therapy and it has potential for harm.

5 Don’t routinely perform sperm DNA fragmentation testing.

High-grade evidence to support the routine use of sperm DNA fragmentation testing as part of initial screening investigations for infertility is lacking.

6 Don’t routinely perform hysteroscopy prior to IVF in women with a normal transvaginal ultrasound.

Hysteroscopy before IVF in a person with a normal uterus on transvaginal ultrasound does not improve the live birth rate.

7 Don’t perform endometrial receptivity testing.

Current available endometrial receptivity testing with personalized embryo transfer causes patient discomfort, additional costs, with no improvement in pregnancy rate.

8 Don’t do repetitive hormone tests and ultrasounds in the work up of infertility.

Repetitive hormone blood tests (FSH, LH, estradiol and progesterone) and ultrasounds during a menstrual cycle to advise infertile patients on when to time intercourse are not necessary. Optimal timing of intercourse to achieve pregnancy can be easily performed through at home urinary ovulation predictor kits or the use of a fertility application with high fecundability rates. Additionally, these tests create patient discomfort, require travel to the clinic, and use of plastic blood tubes and reagents, contributing to the growing negative impact of emissions and healthcare waste on the environment.

9 Don’t conduct in-person visits if a virtual visit is feasible, clinically appropriate and preferred by the patient.

Travelling long distances to access treatment for infertility is not uncommon. Most fertility consultations and follow-up visits can be safely performed remotely. CO_2 emissions from transportation contribute to greenhouse gas emissions and climate change, which can be significantly reduced by providing virtual visits instead of in-person visits. Virtual care can also reduce time away from work and costs to patients.

How the list was created

The Canadian Fertility and Andrology Society (CFAS) Choosing Wisely National Working Group used a modified Delphi consensus approach, consisting of 5 rounds, to generate item ideas, review supporting evidence, assess clinical relevance, estimate recommendation impact and narrow the items for the original list. The Working Group was comprised of 11 diverse clinicians with experience in the field. Round 4 of the Delphi process consisted of a National CFAS Membership Survey to rank the remaining 13 items. The top 5 items were selected based on 4 qualities: prevalence, cost, potential for harm and impact on clinical practice (round 5). The CFAS Board of Directors provided feedback which was incorporated into the composition of the final list approved by the Board. The first 5 recommendations were released in January 2020. Additional recommendations were added to the list in March 2024. The CFAS Choosing Wisely Canada Working Group Lead and the Clinical Practice Guideline Committee created the new recommendations and annual revision of the list which was approved by the CFAS Board of Directors.

Climate-Conscious Recommendations

Choosing Wisely Canada's climate-conscious recommendations are developed by clinician societies to improve planetary health without compromising patient care. These recommendations highlight everyday practices we can reduce or eliminate to minimize environmental harm. Visit our climate page to explore all the recommendations and learn more.

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About Choosing Wisely Canada

Choosing Wisely Canada is the national voice for reducing unnecessary tests and treatments in health care. One of its important functions is to help clinicians and patients engage in conversations that lead to smart and effective care choices.

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