



Your First Appointment: What to Expect

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One in six couples experience infertility, and it is estimated that 250,000 Canadians who are having difficulty conceiving are not seeking treatment. For many couples, it is difficult to accept that there may be a problem. Couples often delay seeking treatment because of denial, nervousness about disclosing information concerning a very intimate part of their lives, shame, guilt and fear of what the assessment will involve, and what may be discovered. These worries are justifiable and very natural, but like many other medical diagnoses, the earlier infertility is discovered, the better your chances of successful treatment.

In addition, if you are single or in a same-sex relationship, you may be reluctant to seek fertility care. Please be reassured that many fertility specialists will work collaboratively with you to formulate the best, balanced approach for your treatment.

This article will let you know what to expect from your initial consultation with a fertility specialist. The first appointment may be the hardest in terms of making the decision to seek help and then go through with it, but let's take the mystery out of the appointment itself.

The initial consultation, and generally all visits to your specialist, should be attended by both partners, unless the person seeking treatment is single. You can expect the initial visit to require an hour to an hour and a half of your time.

Some clinics will have already had you fill out a questionnaire. The American Association of Reproductive Medicine (ASRM) questionnaire is a common starting point, and this form or something very similar may have been sent to you already. It can be a starting point to document relevant prior medical and reproductive history.

History

At your first visit, your care provider will ask you questions with the aim of determining your detailed medical history.

Female History. This will focus on reproductive and menstrual history, and include information about any previous pregnancies as well as details of your menstrual cycles, and accompanying symptoms, such as pelvic pain. A detailed contraceptive history will be recorded. Symptoms that can be a hallmark of ovulation disorders, such as acne and excess hair growth, will be sought.

A detailed reproductive and gynecologic history will include recording how regularly you've had Pap tests, any exposure to sexually transmitted infections, and any episodes of pelvic infection. Details of any previous infertility tests or investigations and previous infertility treatments will also be important.

A history regarding your general health, previous or ongoing illnesses and surgical history, especially operations within the abdomen and pelvis, medications you are on and any allergies will be recorded. Family history will be reviewed, especially illnesses that can be hereditary, in order to help plan for a healthy pregnancy.

Information about your work and working hours and environment, the use of tobacco, alcohol and substances is important. Changes in body weight and exercise patterns are important details as well.

Male History (if applicable). The general medical, surgical and family history, as detailed as above, will be reviewed. Emphasis will be on previous genital or prostate infections, trauma or surgery to, or near, the reproductive organs. Occupation and exposure to environmental factors (heat, vibration, chemicals, pesticides) will be elicited. General health, weight and exercise patterns are important, as well as exposure to prescribed medications, tobacco, alcohol and other non-prescribed substances.

Couples History (if applicable). Frequency and timing of sexual intercourse will be reviewed, as well as any difficulties experienced such as pain during intercourse, difficulties with erection or ejaculation. A history of pregnancy during a prior relationship is also an important detail that will guide future investigations.

Examination

Female. Depending on what day of the menstrual cycle you are on, many specialists will perform a transvaginal ultrasound at the first visit. This ultrasound will assist in the evaluation of your uterus (to check the structure as well as any abnormalities such as fibroids or polyps), and your ovaries (to check for ovarian cysts and resting follicles). If an abnormality has been noted either on ultrasound or in your history, a bimanual exam (where the specialist inserts two fingers into the vagina and uses the other hand on the abdomen to feel the internal pelvic organs) may also be performed.

Male (if applicable). If an examination of the male genitalia is required, this will not be performed on the day of the first visit as it will require a referral to a Urologist who specializes in male infertility.

Investigation

Basic investigations will focus on the evaluation of the three essential factors required for pregnancy to occur: ovulation (monthly egg release), the functioning of ovaries and fallopian tubes, and the quality of semen. These tests will need to be performed on specific days depending on the menstrual cycle and may require a booking. Therefore, they will not likely be performed on your first visit.

Ovulation. Determination of normal ovulation (monthly release of an “egg”) often can be determined by reviewing menstrual history. A history of regular menstrual cycles, usually indicated by a cycle length of 25-35 days, the presence of pre-menstrual symptoms such as breast tenderness and bloating, and cramping with periods, is taken to indicate that ovulation has occurred normally.

If it is unclear by history alone as to whether ovulation is happening, other methods to evaluate the menstrual cycle may include “cycle monitoring” (periodic blood tests and transvaginal ultrasound assessment), or measurement of blood progesterone levels.

Assessment of Fallopian Tubes and Uterine Cavity. For normal conception to occur, sperm and egg must be able to meet, and this happens in the fallopian tubes. The best way to evaluate the anatomical relationship of the fallopian tubes and ovaries is a laparoscopy. However, this is an operation performed under general anaesthetic, and is not usually the first method of evaluation in most women. Laparoscopy is usually only considered as the first step if there is significant reason to suspect disruption in the function of these organs (such as a history of pelvic infection or sexually transmitted disease, or signs, symptoms or clinical finding suggestive of endometriosis).

In many women, the condition of the fallopian tubes and contour of the uterine cavity can be initially assessed by less invasive tests, such as a hysterosalpingogram (HSG) or sonohysterogram. An HSG is a test in which a contrast liquid (a dye) is slowly injected into the uterus through a small catheter placed through the cervix. X-Rays are taken and during the injection of the dye and images are recorded to show the uterine cavity and the fallopian tubes as the dye runs through the fallopian tubes, demonstrating that there is no blockage. A sonohysterogram is similar. In this test sterile water or saline solution is flushed into the uterine cavity through a catheter, and a transvaginal ultrasound is performed simultaneously. Ultrasound pictures are taken demonstrating the uterine contour. Although the fallopian tubes cannot be followed throughout their length by this technique, a fallopian tube is likely unobstructed if air bubbles are seen flowing through the initial segment of the fallopian tubes, where they leave the uterus, if fluid does not appear to collect within the tube, and a collection of free fluid is subsequently demonstrated in the pelvis.

Male Factor (if applicable). Male factor infertility is evaluated by examining an ejaculated sperm sample. Ideally, a sperm sample should be collected at the lab where it will be examined. The period of abstinence from ejaculation (by intercourse or masturbation) should have been no less than two days and no longer than five days. The sample is collected in a sterile container by masturbation. If a sperm sample cannot be produced at the lab (and is produced, for example, at home), it must be transported to the lab within one hour of production and be kept at body temperature (for example, by placing in the underarm) while transporting it.

One of the most important factors in evaluating the results of a semen sample is the quality and experience of the lab performing the test. As a semen analysis evaluates several quantitative and qualitative factors of a semen sample, an experienced andrology lab that routinely evaluates a high volume of semen samples each year is needed. A semen analysis performed at a center that rarely evaluates these samples can be misleading. As semen samples normally fluctuate over time, and because the life cycle of sperm production is almost three months, more than one sample over several months may be required to get a true picture of sperm quality. Any abnormalities would be followed up by an adequate urologic evaluation, which will include a physical examination, blood tests and possibly an ultrasound evaluation.

Other tests. Other routine blood tests that may be ordered would include blood type and presence of any blood group antibodies, and documentation of immunity to Rubella and Varicella. Genetic screening tests specific to a particular cultural or ethnic background in which certain genetic diseases are prevalent (such as Sickle Cell Anemia, Thalassemia, Tay Sachs Disease or Cystic Fibrosis) may be ordered.

Other tests that may be ordered to assess ovarian function would include menstrual cycle day three hormone evaluations and transvaginal ultrasound, evaluation of thyroid function and prolactin levels. Blood tests that are required prior to almost any fertility treatments include the evaluation of the presence of communicable viruses (hepatitis B, hepatitis C, syphilis exposure, HIV virus). Often all blood tests are ordered at once in order to minimize the time required to make a diagnosis and maximize the ability to offer a treatment plan. Generally, all evaluations, including blood tests, tubal assessment, viral screening, ultrasounds, and semen analysis can occur over one to two months.

In approximately 85% of cases, a diagnosis will be made towards which a treatment plan can be tailored. A female cause of infertility is found as often as a male cause (approximately 30% each). In a third of couples, both female and male factors may be present that are interfering with natural conception. In approximately 15% of couples, no obvious abnormality is found and the label “unexplained” infertility is used, which really just means that all known causes have been ruled out. A diagnosis of unexplained infertility does not mean that nothing can be done to increase the chances of pregnancy, and fertility treatments can increase the likelihood of conception even when there is no obvious problem.

Although it may seem overwhelming to begin a fertility evaluation, you should remember that your fertility doctor is there to help you achieve your goal of forming a family. A normal evaluation after a short duration of infertility may be all that is required to reassure you that there is no major problem and that you should keep trying. If an obvious factor is found, then a more directed solution can be planned. Likewise, if you are single or in a same-sex relationship, there are family-building options.

It is important to remember that increasing female age has a marked negative effect on the ability to conceive naturally, as well as on the likelihood of success with all forms of fertility treatment. Delaying a fertility evaluation for several years while waiting for “nature to take its course” may therefore not be in your best interest. Be proactive with your own health and reproductive life plans and you are less likely to regret what might have been.