CASE 10

ID/CC

A 27-year-old female complains of **inability to conceive** for 4 years.

HPI

The patient has had **chronic pelvic pain** for 8 years with an **increase in the quantity and frequency of her menstrual periods** (HYPERPOLYMENORRHEA) and frequent spotting. She has also experienced progressively worsening **dysmenorrhea** and **pain during coitus** (DYSPAREUNIA).

PE

VS: mild hypotension (BP 100/60); no fever. PE: umbilical area shows 3-mm **hyperpigmented**, **raised**, **nontender nodule** (extrapelvic endometrial implant); pelvic exam reveals **fixed**, **retroverted uterus** with **tender nodularity in uterosacral ligament**; cervix normal; **diagnostic laparoscopy** reveals multiple rust-colored ("POWDER BURN") endometrial implants in ovaries, round and broad ligaments, tubes, and cul-de-sac with adhesions.

Labs

CBC/Lytes: normal. TFTs: normal. UA: normal. Infertility panel normal in patient and spouse; biopsies (of endometrial implants) reveal **stroma and glands** identical to endometrium (diagnostic of endometriosis).

Imaging

CXR: normal. US, abdomen: cystic masses in both ovaries.

Pathogenesis

Endometriosis is **abnormal implantation of endometrial tissue** outside the uterine cavity, leading to infertility, dyspareunia, and dysmenorrhea. Endometriomas (CHOCOLATE CYSTS) may also be seen, as may hematuria with bladder involvement or rectal bleeding with rectal involvement. It most commonly affects the **ovaries bilaterally**. The diagnosis can be made only by visual inspection of the abdomen (laparoscopy or laparotomy).

Epidemiology

Mean age of presentation is 27, but incidence is not linked to age, race, or socioeconomic status. If present in older children or teens, it can be due to a defect in müllerian duct development. A **family history** of the disease, **retrograde menstruation**, and a history of **prolonged hyperpolymenorrhea** have all been associated with an increased risk of developing symptomatic endometriosis. Approximately 10% of women will develop endometriosis.

Management

The first line of treatment is usually NSAIDs in conjunction with **OCPs** given in a continuous fashion (i.e., no placebo pills are taken) to suppress stimulation and growth of endometrial implants. More aggressive endometriosis may be managed with Depo-Provera (IM progesterone), Lupron (a GnRH analog), or danazol (an androgen derivative). **Surgical measures** include laparoscopic coagulation, laser ablation of lesions, or open surgery with removal of lesions and freeing of adhesions. In cases involving chronic pain that is refractory to medical treatment or when

continued

CASE 10

child bearing is complete, a **total hysterectomy with bilateral salpingo-oophorectomy** may be indicated. In some patients, a **medical and surgical** approach is needed for long-term pain relief.

Complications

Disabling pain, infertility that is refractory to treatment, and recurrent disease when an ovary is preserved after hysterectomy.

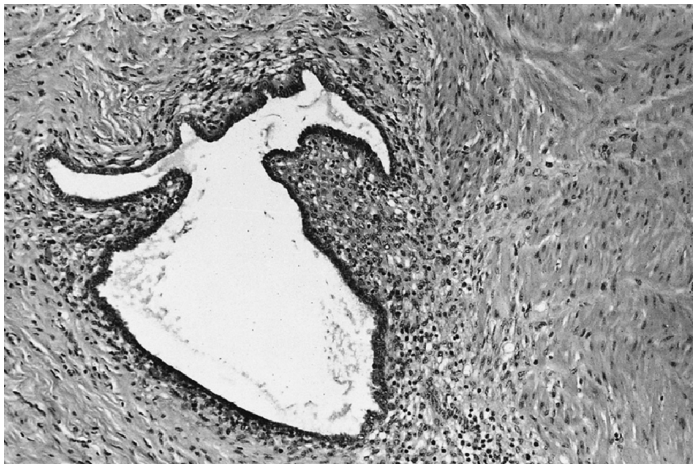

Figure 10 Island of ectopic endometrial gland and stroma within the wall of the urinary bladder.