1. In a typical suburban U.S. population, what percentage of cases of acute pelvic inflammatory disease actually has a positive *C trachomatis* or *N gonorrhoeae* test?

**Response from Dr. Soper:**

*The best source of this information is the PEACH study (reference 54), a prospective, multicenter trial comparing the effectiveness of outpatient and inpatient therapy for those women diagnosed with mild to moderate pelvic inflammatory disease. The cities included in this study were Pittsburgh, Philadelphia, Charleston, Birmingham, Atlanta, and Detroit. Neisseria gonorrhoeae, Chlamydia trachomatis, or both were found in 33% of subjects. Bacterial vaginosis was present in almost two thirds of these women.*
2. You state that the “microbial milieu of bacterial vaginosis...potentiates the development of cervical inflammation and may facilitate ascending infection by cervical and vaginal microorganisms, thus resulting in endometritis and salpingitis.” Should bacterial vaginosis, even asymptomatic bacterial vaginosis (as in a bacterial shift noted on Pap test) be treated whenever identified?

Response from Dr. Soper:

Women with lower genital tract infections with Chlamydia, gonorrhea, and trichomonas and those with the disorder of vaginal flora we define as bacterial vaginosis all have a significant risk for endometritis. Dr. Scholes and colleagues (reference 69) showed that screening for Chlamydia trachomatis decreases the risk for a subsequent clinical diagnosis of pelvic inflammatory disease. Although not proven, it makes sense that treatment of the other disorders would also decrease the risk of upper genital tract infection.

3. One criterion for drainage of a tuboovarian abscess is increasing size. With what frequency do you recommend re-imaging patients with severe pelvic inflammatory disease complicated by a tuboovarian abscess? What factors modify that frequency?

Response from Dr. Soper:

Repeat imaging is not necessary during the initial hospitalization of the patient responding to antibiotic therapy as measured by lysis of fever, resolving abdominal tenderness, and normalization of the white blood cell count. These patients may be followed up in the outpatient department. For those women with a worsening clinical picture, a repeat imaging study, usually ultrasound, in 48 hours is appropriate.
4. Since there is “little to no long-term morbidity associated with cervicitis or endometritis without the concurrent association of salpingitis,” is the management of pelvic infection in a patient who has had tubal occlusion for sterilization different from someone who was not sterilized? Is there a different risk of salpingitis for someone with tubal sterilization?

Response from Dr. Soper:

The treatment of pelvic inflammatory disease is the same in women with and without prior tubal sterilization. The risk of infection and the clinical diagnosis are also the same. The difference is that women having undergone tubal sterilization have “stump salpingitis” but due to fistula formation, may also have distal tube involvement.

5. In cases of chronic pelvic pain with the unexpected findings on laparoscopy of bilateral clubbed tubes and hydrosalpinges, do you recommend intraoperative and/or postoperative antibiotic prophylaxis?

Response from Dr. Soper:

The discovery of clubbed tubes and hydrosalpinges during diagnostic laparoscopy alone does not require the administration of antibiotic prophylaxis. However, if chromotubation is performed, perioperative antibiotic prophylaxis (I use 1 gram cefazolin intravenously) is recommended much like antibiotic prophylaxis is recommended in the woman undergoing hysterosalpingogram who either has a history of a sexually transmitted infection or pelvic inflammatory disease or is discovered to have abnormal fallopian tubes at the time of the procedure. This perioperative prophylaxis will decrease but not eliminate the risk of subsequent pelvic inflammatory disease.

The finding of clubbed tubes and hydrosalpinges is an indication of past, not current, infection. Chromotubation can seed the fallopian tubes, which, in these cases, are structurally abnormal and less able to clear the inoculated microorganisms due to the tubes’ partial or total obstruction.
6. Should all women with a history of pelvic inflammatory disease be followed early in a subsequent pregnancy as though they had an ectopic pregnancy in the past? Is their risk of an ectopic pregnancy so high that they should have first-trimester serial hCG levels until ultrasound identification of the location of the pregnancy is possible?

Response from Dr. Soper:

*Up to 14% of women with prior episodes of pelvic inflammatory disease will develop an ectopic pregnancy. Close follow-up of these women early in pregnancy to confirm the location is recommended. An added benefit of early diagnosis of ectopic pregnancy is the potential for medical therapy.*

7. If laparoscopic drainage of an intact tuboovarian abscess is done by abscess rupture and suction with copious irrigation, why is adnexectomy and not just copious irrigation and suctioning recommended for a spontaneously ruptured tuboovarian abscess?

Response from Dr. Soper:

*The indication for any tissue extirpation at the time of surgery for tuboovarian abscess is based on the presence of tissue necrosis. In those cases in which the surgeon wants to be as conservative as possible (younger patient with limited or no parity), incision and drainage along with copious irrigation of the abscess cavity is acceptable. However, all necrotic tissue (dark, dusky, nonbleeding tissue without blood supply) should be resected. Necrosis is more likely to affect the adnexae than the uterus.*

*Women with a ruptured tuboovarian abscess are usually seriously ill, some of them in septic shock. It is more likely that these women will require laparotomy instead of laparoscopy. The goal of surgical exploration in these cases is the removal of infected, necrotic tissue. However, in these cases, you don’t want to be in a situation postoperatively in which a seriously ill patient has failed to improve and you’re worried that your conservative therapy left behind tissue that*
will require another operation to remove. Adnexectomy, even bilateral salpingo-oophorectomy if both adnexae are involved, can be life saving.

8. For operative drainage of a tuboovarian abscess, do you recommend leaving a drain in place postoperatively until clinical improvement by drain output, clinical course, and metabolic profiles have occurred?

Response from Dr. Soper:

In most cases, drainage of the operative site is recommended. This can be accomplished with a close suction drain exiting the anterior abdominal wall or a Malecot drain placed through the cul-de-sac and into the vagina.