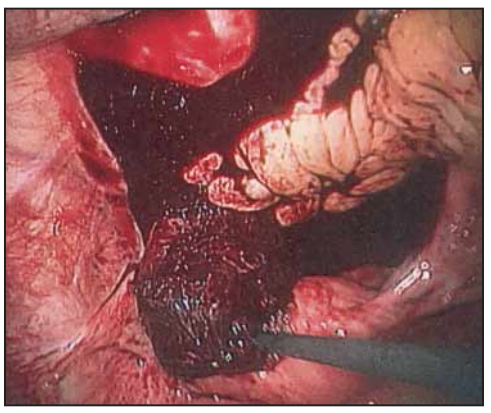
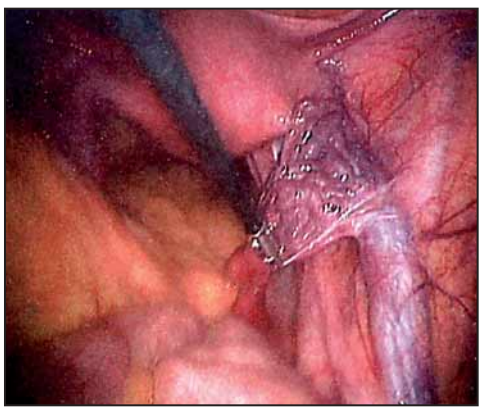
Laparoscopic Tx Okay for Ectopic Pregnancy, Shock

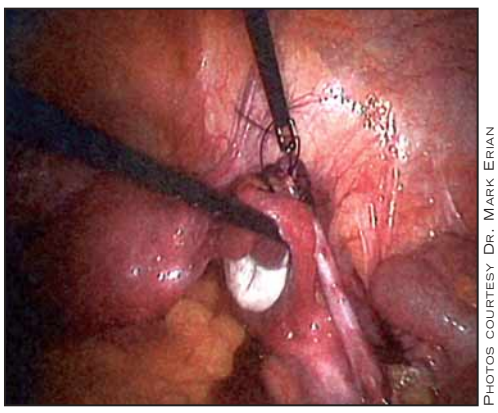
BY SHERRY BOSCHERT
San Francisco Bureau



Severe intraperitoneal hemorrhage occurs as a result of a ruptured ectopic pregnancy.



This vantage point shows right broad ligament varicosities.



Broad ligament varicosities are shown after laparoscopic suturing is performed.

Photos courtesy Dr. Mark Erian

San Diego — Laparoscopic management for ectopic pregnancy was safely undertaken in 12 women who were in shock, Mark Erian, M.D., reported at an international congress of the Society of Laparoendoscopic Surgeons.

He reviewed records of 12 patients with clinical hypovolemic shock due to a ruptured fallopian tube ectopic pregnancy who were treated laparoscopically in one gynecology unit where minimally invasive surgery is the norm. All patients survived and were successfully treated, said Dr. Erian of Royal Brisbane and Women's Hospital, Brisbane, Australia.

The report of the 12 cases was coauthored by Glenda McLaren, M.D., of the University of Queensland, which is in Brisbane.

Laparoscopic management is the mainstay for women with ectopic pregnancy who are not in shock, and it should still be even when shock occurs, Dr. Erian said. His unit has successfully treated an additional 5 cases of ectopic pregnancy in women with hypovolemic shock since the original series of 12 cases, he added.

The original 12 cases were seen over a period of approximately 4 years, the researchers said. Such cases are relatively rare. Some of these patients had been airlifted by helicopter to the hospital from other parts of Australia.

The patients had a mean age of 21 years (ranging from 15 to 43 years), and all had been amenorrheic for a mean of 7 weeks except two patients for whom the latest normal menstrual period was unknown. Serum β-HCG measurements showed a mean value of 4,850 IU/L. Symptoms and findings of a pelvic examination usually pointed to ectopic pregnancy. Preoperative ultrasound scans showed no intrauterine gestations or excessive peritoneal fluid, and usually showed an adnexal mass with heterogenic echogenicity.

Urgent resuscitation measures, including blood transfusion, stabilized each patient's hemodynamic status. After placing the patient in an exaggerated Trendelenburg's position with a 15- to 25-degree tilt, Dr. Erian performed laparoscopy via a left upper quadrant abdominal approach.

"I always ask the anesthetist to pass a nasogastric or an orogastric tube to make sure that when I pass my first trocar, I'm not going to find myself right inside the stomach," he noted.

A four-portal entry technique and video laparoscopy allowed maximum access and maneuverability of instruments. In nearly every case, the pelvic organs were bathed with blood, requiring copious irrigation with warm Hartmann's or Ringer's solution and suction for adequate visualization.

The first step in management was to stop the bleeding from the ruptured fallopian tube by using monopolar coagulation diathermy, followed by controlled salpingostomy to remove the ectopic pregnancy. The specimen was sent for histologic examination to confirm the diagnosis. A negative suction drainage apparatus was placed in the pouch of Douglas and left in the pelvis for 6-8 hours following surgery.

After surgery, patients were given prescriptions for a few weeks' worth of iron supplements if needed, and β-HCG values were monitored at least weekly until they fell to nonpregnant levels.

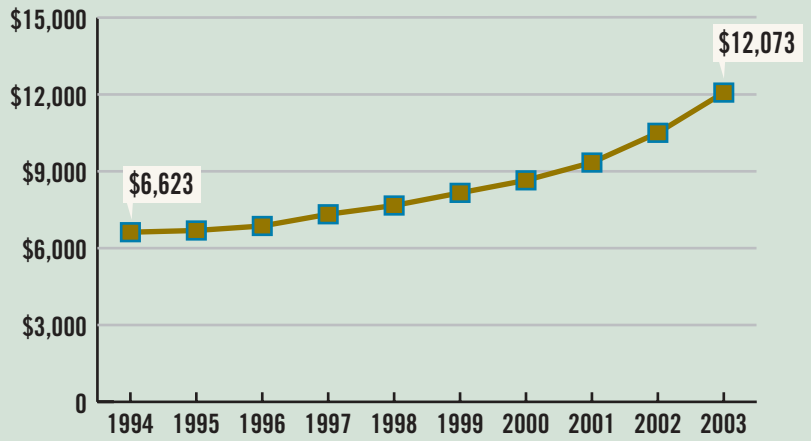
Estimated blood loss averaged 1.8 L. Surgical treatment lasted a mean of 29 minutes. Serum β-HCG levels dropped to nonpregnant levels in 4-6 weeks in all except one patient whose β-HCG level fell but did plateau at 1,800 IU/L for 10 days.

That patient then was readmitted and given a course of methotrexate and folinic acid. Her serum β-HCG level declined to a nonpregnant level 4 weeks later.

No cases reportedly required laparotomy. ■

DATA WATCH

Median Hospital Charges for Ectopic Pregnancy on the Rise



Note: Based on weighted national estimates from Healthcare Cost and Utilization Project's Nationwide Inpatient Sample.
Source: Agency for Healthcare Research and Quality

Kevin Foley, Research

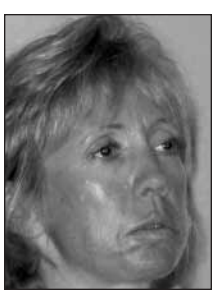
Rapid Test Has Its Place in GBS Infection Prevention

BY SHARON WORCESTER
Southeast Bureau

Charleston, S.C. — Rapid real-time polymerase chain reaction testing for group B streptococcus detection proved at least as sensitive and specific as standard culture screening at 35-37 weeks' gestation in a recent study.

Two vaginal-rectal swabs were collected from each of 190 women enrolled in the study after presenting in labor. One sample was tested using the Food and Drug Administration–approved IDI-Strep B assay and analyzed using the FDA-approved Smart Cycler I instrument; the other sample was used for enriched culture for GBS, Deborah M. Money, M.D., reported at the annual meeting of the Infectious Diseases Society for Obstetrics and Gynecology.

In the more than 150 women in the study who also underwent the currently recommended 35- to 37-week culture screening and had results available for analysis, the rapid test had a sensitivity of 89%, compared with 85% for the 35- to 37-week culture, and a positive predictive value of 97%, compared with 94% for the 35- to 37-week culture. The values were based on comparison with culture at delivery, said Dr. Money of the University of British Columbia, Vancouver.



'We were a little surprised by the lack of superiority of PCR to the culture methodology.'

DR. MONEY

The median time from specimen acquisition to availability of results with the rapid test was 90 minutes, with a range of 30 minutes to 4 hours. About 87% of results were available within 2 hours; cultures can require a few days for results. Colonization rates were about 30% with both the rapid test and the culture, she said.

Theoretically, the rapid test could be used during labor to circumvent some of the potential problems inherent in the 35- to 37-week culture method of screening, such as its reliance on the provider to do the screening properly, the uncertainty of the availability of results by delivery (which can jeopardize the chance of a colonized patient receiving the recommended 4 hours of antibiotic therapy during labor for preventing vertical transmission), and the fact that some women do not have prenatal care and would therefore not present for the 35- to 37-week culture. But with the similar sensitivity and specificity to 35- to 37-week culture demonstrated by the rapid test in this study, its usefulness for routine care is unclear.

"We were a little surprised by the lack of superiority of PCR to the culture methodology," said Dr. Money, adding that larger studies will be required to determine if there is a statistically significant sensitivity and cost advantage with the rapid test over the 35- to 37-week culture.

One setting in which the rapid test can be of particular use now, however, is in patients who present in labor without information regarding their group B strep status. For those patients, the test is feasible, it has a reasonable turnaround time and a comparable result to culture screening, and it can be performed in a busy labor and delivery room, she said. ■