Uterine perforation during sterilization by laparoscopy and minilaparotomy

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Uterine perforation during sterilization by laparoscopy and minilaparotomy has not been recognized as a significant problem until White and associates reported an astonishingly high rate (30 per 1,000 procedures) in patients who had undergone laparoscopic sterilization in a United States hospital. Using a case-control analysis, they found that the patients who sustained perforations were 10.4 times more likely than the control (matched) patients to have two of the following three characteristics: over 34 years of age, parity more than 1, and obesity in excess of 20% above the ideal body weight for height. Patients with these characteristics were 4.8 times more likely to incur uterine perforation than those who had a longer interval. The difference was highly significant (p < 0.01) by matched chi-square test for triplets.

Patients with an interval of less than 1 year were 4.8 times more likely to incur uterine perforation than those who had a longer interval. The same direction of differences was de-
tected in the laparoscopic and in the minilaparotomy triplets. The difference was statistically significant in the former (p < 0.05), but not in the latter, presumably because of the small number of patients. The relative risks were, respectively, 4.5 and 6.0. With control for age and parity by the Mantel-Haenszel method, the difference remained highly significant (p < 0.01) with a summary relative risk of 4.6.

These findings seem to suggest that the uterus of a woman who has been delivered of an infant or aborted a fetus within 1 year before sterilization is probably more vulnerable to perforation by sounding and/or manipulation during the procedure than is that of a woman who has undergone delivery or abortion more than 1 year earlier.

None of the 38 patients with uterine perforation underwent subsequent surgical intervention, and only five of the 19 patients who came for the 6-month follow-up reported minor complaints or complications. If one assumes that those not attending follow-up did not have significant complications, these results support the opinion of White and associates that conservative treatment is to be recommended over an operative intervention for a uterine perforation induced by a blunt instrument.

REFERENCES