COMPLICATIONS OF CERVICAL CERCLAGE IN IGBO WOMEN

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Igbo women inhabit one of the most densely populated regions of Africa. This study suggests that cervical incompetence in Igbo women is prevalent among the literate and higher socioeconomic group, that it occurs at an earlier age when compared with published series, possibly reflecting earlier marriage and childbearing, and that the damage occurs mostly during the first or second delivery.

Reported complications of cervical cerclage operations for cervical insufficiency include hemorrhage, cervical dystocia, rupture of membranes, chorioamnionitis, placental abscess, uterine rupture, maternal death,[1] and decubitus ulcer.[2]

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PATIENTS AND METHODS

Of 36,148 consecutive pregnancies among Igbo women at the University of Nigeria Teaching Hospital, Enugu, between 1974 and 1981, 165 were complicated by cervical incompetence, an incidence of 0.46 percent. Cervical cerclage operations were performed in 154 cases (McDonald procedure, 127; Shirodkar technique, 27) for recurrent mid-trimester abortion associated with an effaced, dilated, or torn cervix. Fetal salvage was 73.7 percent. Abortion and premature delivery accounted equally for the fetal losses.

COMPLICATIONS

Postoperative complications were few, the most common being vaginal bleeding, mostly during abortion or premature labor (Table 1).

There was one maternal death from endotoxic shock. The 25-year-old patient in her fifth pregnancy was admitted at 21-weeks' maturity, five weeks after cervical ligation, and eight hours after spontaneous rupture of membranes and onset of uterine contractions. She was febrile on admission (temperature 38.4° C), and after removal of the suture, which had cut deep into the inflammed cervix, soon aborted a 420-g fresh female fetus.

TABLE 1. COMPLICATIONS OF 154 CERVICAL CERCLAGE OPERATIONS IN IGBO WOMEN

Complications	No. of Patients
Immediate (within 24 hours)	
Severe vaginal hemorrhage	1
Abortion	1
Urinary infection	1
Late	
Vaginal discharge	3
Missed abortion	3
Threatened abortion/premature labor	3
Severe hemorrhage at abortion	2
Cervical dystocia in labor	1
Maternal death (endotoxic shock)	1
Reinsertion of suture	1
Total	17

Anti-gas gangrene and anti-tetanus sera were administered and a course of intramuscular streptomycin and penicillin started.

Twelve hours after the abortion, her temperature rose to 39° C, pulse rate, 104 beats per minute and of poor volume, and blood pressure, 80/40 mmHg. There was generalized pelvic tenderness and an offensive yellowish vaginal discharge. Blood-investigation results supported a diagnosis of pelvic peritonitis. The patient was transfused with two units of blood, and dopamine infusion commenced. Six hours later the patient's temperature rose to 40.2° C, and she became restless, dyspneic, and disorientated. Despite adequate fluid infusions, temperature and electrolyte control, addition of intravenous gentamicin and metronidazole to the antibiotic regime, oxygen by face mask, and treatment with intravenous frusemide and digitalis, she soon became comatose. An artificical respirator was used but her condition deteriorated rapidly; she died 22 hours after admission. The relations refused autopsy.

The blood culture grew Escherichia coli only and the high vaginal swab a mixture of E coli and Proteus vulgaris. Not unexpectedly, the anaerobic culture was negative as the laboratory still has difficulty recovering anaerobes. The E coli were sensitive to streptomycin, chloramphenicol, and polymyxin B sulfate, but resistant to ampicillin, tetracycline, and gentamicin.

CONCLUSION

Suggestions for reducing post-cerclage complications include careful selection of patients for surgery, detection, and pre-operative treatment of any urinary or vaginal infection, prophylactic postoperative broad-spectrum antibiotics, early detection of imminent labor, prompt removal of the cervical suture, and performance of the operation by experienced personnel.

Literature Cited

1. Cousins L. Cervical incompetence: A time for reappraisal. In Pitkin RM, ed. Clinical Obstetrics and Gynecology, vol 23(2). Hagerstown, Maryland: Harper & Row, 1980, p 479.

2. Mikrut W. Ulcus decubitale cervicis uteri—nietypowe powiklanie operacji Shirodkara. Wiadomosci Lekarskie 1980; 33(1):57-59.