Delivery Following Colon Interposition*

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Background: Colon interposition carries a significant complication rate due to attenuated arterial blood supply, because the interposed colon segment depends on a single vascular pedicle.

Cases: We report for the first time five vaginal deliveries in two women following the operation, illustrating the dilemmas encountered in choosing the delivery method in these patients.

Conclusion: We suggest that vaginal delivery following colon interposition is feasible. If cesarean section has to be performed, extra care must be exercised not to damage the vascular pedicle, particularly when there is a need for mobilizing or palpating the posterior aspect of the uterus.

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Key words: cesarean section; colon interposition; delivery; esophageal replacement; pregnancy

Colon interposition is the surgical procedure in which the right or left colon is used as an esophageal substitute.1 In young people, one of the common indications for this operation is caustic stricture following accidental or suicidal lye injury.1–3 The operation carries a significant complication rate due to attenuated arterial blood supply, because the interposed colon segment depends on a single vascular pedicle.1,4,5 We report five vaginal deliveries in two women following the operation, illustrating the dilemmas encountered in choosing the delivery method in these patients.

Case Reports

The patient, a 26-year-old primigravida, underwent total esophageal replacement with left colon interposition because of a suicidal lye injury at the age of 20 years. Ten months and 12 months following the primary operation, balloon dilatations of the proximal anastomosis were performed due to strictures. The pregnancy follow-up was uneventful, and she had only mild “esophageal” reflux without the need for pharmacologic treatment. Near term, her thoracic surgeon suggested an elective cesarean section for the prevention of possible damage of the blood supply to the transposed colon during vaginal delivery or at an emergency cesarean section. Following a discussion of the case with the obstetricians, a trial of labor was advised, with cesarean section left for obstetric indications. At 41 weeks of gestation, spontaneous labor developed and a vacuum extraction was performed because of severe variable decelerations at the end of the second stage of labor. A healthy female infant was delivered, weighing 2,500 g, with Apgar scores of 9 and 10 at 1 min and 5 min, respectively. The mother’s postnatal course was uneventful.

In a subsequent telephone survey of the patients with colon interposition operated on by one of the authors (J.A.B.),1,2,3 another woman who became pregnant following the operation was detected. This woman has had four uncomplicated pregnancies; all infants were born by uncomplicated vaginal deliveries at term, with birth weights of 3,000 to 3,500 g.

Discussion

Colon interposition as an esophageal substitute was first reported in the early years of the 20th century. Since then, various surgical techniques were reported, aimed at decreasing complications.1,2,6,7 However, the operation carries a significant complication rate, mainly due to attenuated arterial blood supply, as the interposed colon segment depends on a single vascular pedicle.8,9 The ascending branch of the left colic artery or the right branch of the midcolic artery, the possibility for damage, if mobilization of the uterus has to be performed or if the repair of the hysterotomy incision is done not in situ but after lifting the uterus through the abdominal incision, a common practice of many obstetricians. This may explain the anxiety of the surgeon who performed the colon interposition, when the mode of delivery came into question. He was disturbed by the possibility that the vascular pedicle might be damaged during delivery or at an emergency cesarean section and suggested an elective cesarean section, allowing for dealing with possible complications under direct vision. The obstetricians, however, were reluctant to perform an elective cesarean section as mobilization of the uterus might be needed during the operation or might be done inadvertently, with possible damage to the vascular pedicle due to adhesions, and increasing the probability for future repeated cesarean section(s). In addition, there are reported difficulties in patients with colon interposition who need surgery for future acquired diseases.1

In a MEDLINE search of the literature using the key words colon interposition, esophageal replacement, delivery, and pregnancy, we could find no suggestions on the preferred delivery method, or reports on women who had vaginal deliveries following colon interposition. We did find, however, one case report of a chronically malnourished woman treated by colonic interposition because of congenital tracheoesophageal fistula/esophageal atresia.8 Yet, her colonic interposition was subsequently bypassed by a percutaneous gastrostomy due to stenosis of the distal
anastomosis and nonfunctioning of the transplant. The woman delivered twice by cesarean section because of maternal or fetal indications: the first time at 33 weeks of gestation when she became dyspneic at rest, and the second time at 31 weeks because of breech presentation in labor. In our patient, vaginal delivery was elected as the preferred method of delivery, cesarean section being left for maternal or fetal indications. During delivery, the surgeon was on-call for a possible cesarean section, while the obstetricians were advised not to mobilize the uterus during an eventual cesarean section.

CONCLUSION

To the best of our knowledge, our cases are the first reported in the literature with vaginal delivery following colon interposition. We suggest that vaginal delivery in these patients is feasible and cesarean section is best left for accepted obstetric indications. However, during an eventual cesarean section, extra care must be paid not to damage the vascular pedicle supplying the interposed colon segment, with particular care when there is a need for mobilizing or palpating the posterior aspect of the uterus. It is suggested that, in this situation, the repair of the hysterotomy incision should be done in situ rather than lifting the uterus through the abdominal incision.

REFERENCES


Refactory Sarcoidosis Responding to Infliximab*

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Despite aggressive treatment with conventional therapy, sarcoidosis may be progressive and debilitating. Tumor necrosis factor (TNF-α) is critical in the genesis and maintenance of granulomatous inflammation. Agents developed to inhibit TNF-α have been approved to treat rheumatoid arthritis and inflammatory bowel disease with unprecedented success. As such, physicians are increasingly using these agents to treat patients with other inflammatory diseases, including sarcoidosis. We report a case of refractory sarcoidosis, involving the lung, eyes, skin, and heart, which flared despite aggressive therapy. Oculocutaneous sarcoid dramatically improved after treatment with the anti-TNF antibody infliximab.

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Key words: cutaneous; infliximab; ocular; sarcoidosis; tumor necrosis factor-α; uveitis

Abbreviation: TNF = tumor necrosis factor

Pulmonologists often are called on to take care of patients with sarcoidosis even when the primary manifestation of the disease is outside the lung. Although much has been learned about the pathophysiology of sarcoidosis, the cause of this disease is still unknown. Recent interests in therapies that target cytokines have been sparked by insights into their role in the pathogenesis of inflammatory diseases, including sarcoidosis. Infliximab, a chimeric, monoclonal antibody directed against tumor necrosis factor (TNF)-α, has been approved for use in patients with rheumatoid arthritis and Crohn disease. There have been case reports1–4 describing the success of infliximab in patients with sarcoidosis who are refractory to conventional therapy. We present a case of multisystem sarcoidosis that was refractory to treatment with multiple immunosuppressive agents. Treatment with infliximab, as part of combination therapy, ultimately resulted in control of the disease.

CASE REPORT

A 50-year-old white woman was referred to our institution in 1997 for management of refractory pulmonary sarcoidosis and uveitis. The diagnosis had been confirmed 8 months prior by transbronchial biopsy. She had been receiving maintenance therapy since that time with 60 mg prednisone daily. At the time of her initial visit in 1997, she had experienced a 60-lb weight gain, worsening hypertension, and glucose intolerance as complications of systemic steroid therapy. Her initial examination revealed an obese, white woman in no distress. She was afebrile and breathing comfortably on room air. Her chest had diffuse respiratory wheezes bilaterally. Heart sounds were regular without murmur or gallop. Her abdomen was soft and nontender, with striae and no organomegaly. The findings of a lymph node

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