Creation of a vagina by repeated coital dilatation in four teenagers with vaginal agenesis

METTE HAASE MOEN
From the department of Obstetrics and Gynecology, University Hospital of Trondheim, Trondheim, Norway


Key words: vaginal agenesis

Submitted 12 April, 1999

Accepted 9 June, 1999

Agensis of vagina has traditionally been treated by surgical construction of a neovagina with insertion of a transplant (1). However, in the youngster with this anatomical defect regular intercourse may gradually create a vagina with an adequate depth.

Case 1
In a 15 year old teenager Mayer-Rokitansky-Küster-Hauser’s syndrome (Rokitansky syndrome) was found to be the reason for primary amenorrhoea. No vaginal pouch was observed during examination under anesthesia. She began a sexual relationship at age 16 and complained of difficulties. A vagina with a length of 5 cm was now observed. She was encouraged to continue her sexual activity. One year later the depth of her vagina was 8–9 cm and she was content with the result.

Case 2
This girl had her coital debut at the age of 17 years, initially with some trouble, but then rather satisfying for her and her partner. At 18 years of age she was admitted for primary amenorrhoea, and Rokitansky syndrome was diagnosed. Her vagina was 3 cm. After another year with regular intercourse she was reexamined, and the vagina had a depth of 10 cm.

Case 3
Rokitansky syndrome was diagnosed in this girl at 16 years of age. An introital dimple of 1 cm was found, and during anesthesis a digital dilatation to a length of 3 cm could be performed. Shortly after she had her sexual debut without any problems.

At the age of 17 the vagina was 6–7 cm and four years later the vagina was 11 cm.

Case 4
At 17 years of age testicular feminization (46 XY) was diagnosed, the gonades were removed and substitution with estradiol was given. The vagina was then 4.5 cm and ended blindly. At nineteen years old she had her sexual debut, initially with some trouble, but then satisfying. At the age of 22 years a vagina of 10 cm was disclosed.

Discussion
Several operative methods for vaginal agenesis have been described, such as abdominal traction of the introital dimple (2), blunt dissection in the rectovesical space with lining by a graft from skin (3), peritoneum (4) or intestine (5). These procedures give a scar on the abdomen or at the site of the skin graft, they are painful and cooperation from the patient postoperatively to perform continued vaginal dilatation is mandatory. Laparoscopically modification of older surgical procedures has recently been suggested (6). The nonoperative method described by Frank (7) consists of daily pressure/dilatation of the introital dimple with tubes for 20 min for more than eight months before coitus can be initiated. This method has also, more recently, been advocated (8). Traditionally, the treatment by surgical means for vaginal agenesis has been delayed until a more mature age, and 17 years as a minimum has been advocated (1). However, in our society 40% of teenagers had their sexual debut before the age of 16 years and 60% before the age of 17 years (9). Certainly these young women are reluctant to consult their doctor before they engage in a sexual relationship.

In the present case series of four teenagers having diagnoses of vaginal agenesis (in three cases due to Rokitansky syndrome and in one case caused by complete testicular feminization) a normal looking and functionally adequate vagina was created by repeated coital dilatation without use of tubes. Their age at their sexual debut was 16 to 19 years. The results after two to four years of regular sexual activity were in all instances excellent with a normal looking vagina with a depth of 8 to 11 cm. In three of the cases the anatomical defect was diagnosed prior to the sexual debut, and the girls were informed to contact the gynecologist before practicing intercourse as they would have difficulties which could be corrected. In spite of this advice, they initiated sexual practice without such a consultation and were able to perform intercourse without instructions, though with initial difficulties. In one case the young girl started intercourse with no knowledge of the reason for her primary amenorrhoea, but she and her partner had coital satisfaction with a vagina of initially only 3 cm.

Our future practice in similar cases will include information about the anatomical structures and demonstration of the introital part of vulva where the penetration shall be directed, and warning about damage to the urethra will be given. A close follow up will be arranged to encourage these young women and their partners.

The above mentioned observation has also been reported from Italy in a letter by D’Alberton and Santi in 1972 (10). They had experience from a series of 41 cases where a vagina was created after a few months with progressive dilatation by repeated coital practice. They advocate that the possibility of coital dilatation should be taken into consideration and explained to the patients as one of the available therapeutic procedures. These authors, as well as Wabrek and coauthors (8), express the hope that surgical treatment for vaginal agenesis might be confined to medical history. With my limited but current learning experience from four cases, I fully support this statement. In young women with an understanding and cooperative sexual partner excellent results can be obtained with little intervention from medical professionals. Young women with vaginal agenesis can have an almost normal sexual debut which probably is important for their self-esteem which already is negatively influenced by the fact that they will never menstruate, neither be able to conceive.

References

Address for correspondence:
Mette H. Moen, Ph.D.
University Hospital, Department of Obstetrics and Gynecology
N-7006 Trondheim
Norway

Postpartum pneumopericardium

AHSAN AL. MALEH
From the Department of Surgery, Hospital Fyn Faaborg, Denmark

Key words: postpartum pneumopericardium; spontaneous pneumopericardium
Submitted 19 December, 1998
Accepted 5 August, 1999

Pneumopericardium is defined as the presence of air in the pericardium. The condition is very rare and can have fatal consequences. We describe a case of spontaneous pneumopericardium that occurred during delivery and regressed leaving no sequella.

Case history
A 30-year-old gravid 1, para 0, without any past medical history, or family predisposition, was admitted to our section after normal delivery. The first stage took about 17 hours, while the second stage was short (45 minutes) but very intensive, resulting in birth of a normal baby, with head presentation, weight 3700. This was followed by the delivery of the placenta which took 15 minutes. No complications were noticed except for a small lesion in the vagina which was consequently sutured under local infiltration anesthesia. During the whole process fetal heart action was monitored by Doppler apparatus, and showed no abnormalities, thus no further monitoring (in form of intrauterine pressure measurements) was needed. There was no need for instrumental intervention in the second stage of labor as it proceeded normally with noticeably intensive effort from the mother. In the first stage though, we used 30% N2O in a very short interval.

Ten hours after labor, the patient started to complain about retro sternal pain and mild dyspnea. She expressed the feeling of a swelling over the neck and chest. Physical examination revealed subcutaneous emphysema along the neck on both sides.

Auscultation of the heart revealed a regular rhythm, decreased in intensity over the second intercostal space, no friction rub, nor murmur was heard. Lung auscultation did not give any sign of pneumothorax, blood pressure was 121/72 mmHg and pulse 70. Chest X-ray revealed subcutaneous emphysema and about 3 mm free air in the pericardium. No pneumothorax or pneumomediastinum was seen (Fig. 1). The ECG was normal. Echocardiography performed the next day described normal hemodynamics of the cardiac chambers, and the pericardium was seen with an increased echo signal over left atrium, which is a sign of air presence.

Because of the patient’s stable clinical condition, it was decided to observe the patient in the department, with frequent X-ray control. The chest pain and dyspnea rapidly began to disappear. Three days later she was discharged with her baby in excellent clinical condition. Before discharge an X-ray and an echocardiograph revealed the pneumopericardium with significant regression.

Discussion
Pneumopericardium was first mentioned in literature in 1844, where Bricheteau described the clinical signs and symptoms and made the diagnosis, which was confirmed later by autopsy (1). Since then several cases have been observed and registered. These cases are best grouped in four categories, according to their etiology (1):

1) Chest trauma (open or blunt).
2) Infection by a gas forming organism.
3) Fistula formation between pericardium and a hollow organ.
4) Iatrogenic.

Fig. 1. X-ray showing pneumopericardium (the arrows).