Synechia of Major Labia and It’s Operative Technique:
A Case Report

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Background: Labial synechia (labial fusion or labial adhesion) is a clinical entity rarely seen in adults. Labial synechia are usually caused by a combination of local inflammation, chronic infection and estrogen deficiency. This condition is not life threatening, but severe cases usually result in urinary problems.

Methods: A case report based on the medical and surgical records was done. We found one case of labial synechia on a 65 years old female which was referred to plastic and reconstructive surgery department from the Gynecology department.

Results: The reconstructive surgery was performed with two stage. Local anaesthetlic adhesiolysis as the first treatment then continued with general anesthesia reconstruction using both labial advancement flap to close the mucous defect. Patient was stay in the hospital in 5 days, and the flap to reconstruct the labia was vital.

Conclusion: Multifactorial causes such as chronic infection, chronic inflammation, poor hygiene and history of systemic disease can be the etiology. Surgical approach is the best choice for this case because the synechia causes urinary problems.

Keywords: labial synechia, transposition flap, chronic irritation, infection of the vulva

PATIENTS AND METHODS

A 65 years old patients with 8 children and is in menopausal phase since 10 years ago came to our clinic with urinary problems. This condition has been complained by the patients since 3 months before. She has a history of leukorrhea. She first went to the Obstetric and gynecologic department. From the physical examination we found the labial crease was closed and flour albus was apparent. The sonographic findings were pyometri and hematometri. The gynecologist then referred her to the

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plastic and reconstructive surgery division.

The patient had a history of diabetes with uncontrolled blood glucose. From the physical examination the labial crease is closed with only an 0.5 diameter opening. We decided to do a reconstructive surgery to the patient.

**RESULT**

The first surgical therapy was an incision with a surgical blade in local anesthesia to separate the labia. Afterwards we inserted the catheter. We can see mucosal defect on both side of the labia which was then covered with moist gauze (Figure 1).

The next reconstruction was done in general anesthesia. The defect on the mucosal labia was 8 x 1.5 cm. We did an excision on both mucosa and closed it with bilateral advancement flap using absorbable 6.0 sutures. The catheter was also replaced with a silicone catheter. After 5 days the patient was then sent home (Figure 2).

During follow up on the 7th and 14th day postoperative we found the flap was vital and the silicone catheter was removed. From the skin swab we found fungal infection which was then medicated by the gynecologist. The patient was educated to personal hygiene and routine follow up at the outpatient care to prevent recurrence.

**DISCUSSION**

Labial synechia is a condition commonly found in childhood (3 months to 6 years old) and in postmenopausal women. In adults the symptoms can include urinary problems such as urinary retention and dyspareunia 1,2,3,4.

The therapy can include topical estrogen for hypoestrogen conditions. This topical treatment can go up to 3 to 4 weeks until recovery is achieved. If with this conservative treatment no results are achieved there can be urinary tract infection and renal dysfunction. In this patient we did an adhesiolysis in local anesthesia and continued with reconstructive surgery. Adhesiolysis in general anesthesia are needed in 5-10 % of cases. Postoperatively we can treat with topical estrogen to prevent recurrence. The use of topical betamethasone can be considered in children, while in adults there has been no study on it 5,6,7,8.

![Figure 1. Labial synechia (left); post adhesiolysis (middle); Mucosal defect at both labia (right)](image1)

![Figure 2. Mucosal excision (left); Post labial advancement flap (middle); 1 year follow up (right)](image2)
Recurrence can happen after surgery. We need an evaluation postoperatively and therapy to the underlying cause of the labial synechia. On recurrent cases, the use of amniotic membrane grafting is recommended by Lin.9

This patient came with urinary problems, had a history of flour albus and fungal infection. The poor hygiene on the labial area was also found. She also had diabetes with uncontrolled blood glucose. We concluded the multifactorial cause was chronic infection and inflammation, poor hygiene as the etiology.

Surgical therapy was the best option because the case had already caused urinary problems. In this patient we did an adhesiolysis in local anesthesia as the first treatment. We continued with reconstructive surgery by advancement flap to cover the mucosal defect10.

CONCLUSION

With good therapy, intense evaluation and causal treatment, the recurrence will be low. Education to patients is needed to achieve the patient consent to routine evaluation and therapy post operatively.

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