

EXTERNAL GENITALIA

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

Muhammad Samiadji, Pujisriyani, Ni Made Swantari, Chaula L. Sukasah
Jakarta, Indonesia

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 anaesthetic 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

Latar Belakang: Sinekia labialis (adesi labialis atau sinekia vulva) adalah kelainan yang jarang ditemui pada orang dewasa. Penyakit ini umumnya disebabkan oleh inflamasi lokal, infeksi kronis dan defisiensi estrogen. Kelainan ini tidak mengancam nyawa, namun pada kasus yang berat dapat mengakibatkan gangguan berkemih.

Metode: Data diambil dari rekam medis pasien di RSCM. Terdapat satu kasus sinekia labialis pada orang dewasa yang dirujuk dari bagian Obstetri dan Ginekologi ke Divisi Bedah Plastik dan Rekonstruksi.

Hasil: Tindakan pembedahan dilakukan dalam dua tahap. Tahap pertama dilakukan adhesiolisis dalam anastesi lokal yang dilanjutkan dengan rekonstruksi menggunakan labial advancement flap. Pasien dirawat inap selama 5 hari dan flap vital dalam follow up.

Kesimpulan: Penyebab kelainan ini multifaktorial seperti infeksi kronis, inflamasi, higienitas yang buruk dan kelainan sistemik lain. Tindakan pembedahan merupakan pilihan terbaik mengingat sinekia dapat mengakibatkan gangguan berkemih.

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

Labial synechia (labial adhesion or vulvar synechia) is an adhesion of the labia which can cause a part or the whole labia fuse together. This condition can be found during childhood (less than 5 years old) or during the menopausal period^{1,2,3,4}. The cause is multifactorial, but during childhood it can be caused by hypoenestrogenism or trauma to the vulvar area, while in adults the cause is chronic infection. The incidence of this condition is quite rare to be found in any literature.

*From Division of Plastic Surgery, Department Of Surgery, Cipto Mangunkusumo General National Hospital, Universitas Indonesia.
Presented in 15th IAPS Scientific Meetings In Semarang, East Java, Indonesia*

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 hemato-metri. The gynecologist then referred her to the

Disclosure: The authors have no financial interest to declare in relation to the content of this article.



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)



Figure 2. Mucosal excision (left); Post labial advancement flap (middle); 1 year follow up (right)

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 Lin⁹.

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.

Ni Made Swantari, M.D.

Plastic Surgery Division

Cipto Mangunkusumo General National Hospital

Jalan Diponegoro.No.71, Gedung A, Lantai 4.

Sayanimadeswantari@yahoo.com

REFERENCES

1. Cooper et al. Labial Adhesion. Available at <http://emedicine.medscape.com/article/953412-overview>. Accessed February 4 2011.
2. Tamay et al. Idiopathic Labial Fusion In A Young Adult: A Case Report. *Anatol J Obstet Gynecol.* 2010; 1: 2.
3. Kumar RK et al. Labial adhesions in pubertal girls. *Arch Gynecol Obstet* 2006; 273(4): 243-5.
4. Punam et al. Labial Fusion. Available at http://www.bhj.org/journal/2001_4302_apr01/case_313.htm. Accessed February 5 2011.
5. Nurzia et al. The Surgical Treatment Of Labial Adhesion In Pre Pubertal Girls. *J Pediatric Adosc Gynecol.* 2003
6. Norbeck et al. Labial Fusion Causing Upper Urinary Tract Obstruction. Section of Urology, University of Michigan. 1993
7. Mayoglou et al. Succes of Treatment Modalities Fir Labial Fusion: A Retrospective evaluation Of Topical And Surgical Treatments. *J Pediatr Adolesc Gynecol.* 2009: 247-50.
8. Atsushi M, Junji M. Labial adhesion In Post Menopausal Women: A Report Of Two Cases. *Nishinohon Journal Of Urology.* 2005
9. Lin YH, Hwang JL, Huang LW, and Chou CT. Amniotic membrane grafting to treat refractory labial adhesions postpartum. A case report. *J Reprod Med* 2002; 47(3): 235-7.
10. Kenji et all. Y-V Advancement Flaps For Labial Adhesions In Postmenopausal Women. *Plastic And Reconstructive Surgery* Volume 109-Issue 7:2614-2615. 2002.