Labial Agglutination – information for GPs

Labial agglutination (also commonly called labial adhesions or labial fusion) is a condition in which the labia minora fuse in the midline. It can occur in pre-pubertal girls, most commonly between 3 months to 3 years of age, with a prevalence of up to 5% (Bacon, Romano et al. 2015).

It may be identified on genital examination and is commonly noted by parents when changing their girl's nappy. The labia may be partially adherent, involving either the upper or lower labia.

Or, if complete labial agglutination is present (this is rare), girls may present with difficulty urinating, vaginal discharge or pain, recurrent urinary tract or vaginal infections. In the presence of hypopigmentation or punctate haemorrhages (lichen sclerosis), or violaceous papules with white/grey striae (lichen planus), unusual masses or bleeding, referral should be made to exclude other pathology.

The pathophysiology of labial agglutination is thought to be associated with the hypo-oestrogenic state of pre-puberty. There may also be concurrent poor perineal hygiene, trauma or vaginal infection however this is not uniformly evident.

Management

Expectant management if asymptomatic

If the girl is not bothered by the presence of the labial agglutination, and it has only been noticed on routine examination, no treatment is necessary.

Parents may be reassured that the adhesions will resolve when oestrogen levels increase at puberty. This typically occurs around the age of 6 – 8 years old.

Medical management if symptomatic

If a girl is symptomatic from the labial agglutination, topical treatment may be trialled. Manual separation in the clinic is not advised as this can be quite painful for girls.

Suggested medical regimens include:

1. Estriol 0.1% (1mg/g) (Ovestin vaginal cream) applied twice to four times daily at the point of midline fusion – continue until resolved.
- Adhesions typically resolve after two to six weeks of Ovestin application; however, it can take up to four months.
- More frequent administration of Ovestin (3 to 4 times daily) should only be continued for 3 – 4 weeks, then the dose reduced to twice daily.
- Uncommon side effects to discuss with parents include minimal vaginal bleeding (< 1%) and breast bud formation (5%), both of which will resolve following cessation of the cream (Schober, Dulabon et al. 2006). Vulvar hyperpigmentation may also be noticed – while this does not resolve, it is likely to also occur during puberty anyway.

2. Hydrocortisone 1% Cream (Sigmacort or DermAid or HydroCortic Cream)
- This may be used as an adjunct to the estriol, or as secondary treatment if estriol alone has failed (or if parents refuse 'hormonal therapy' it can be used as an alternative). The

hydrocortisone cream may be mixed with the estriol cream and applied simultaneously to the adhesions.
- Twice daily steroid application should be limited to less than 3 months due to the risk of skin atrophy and systemic corticosteroid absorption.

Risk of recurrence and 'maintenance therapy'

Labial agglutination may recur prior to sufficient oestrogen levels being obtained at puberty. To avoid this, ongoing regular application of emollients/nappy rash cream can be used. If recurrence occurs, parents can be advised to recommence the oestrogen/steroid regimen until resolution is again achieved.

Good perineal hygiene should also be encouraged including wearing cotton underwear and avoiding soaps or sitting in sandy swimwear.

Surgical management if resistant to medical management

Surgical separation of adhesions is rarely required in cases when good compliance to medical treatment has failed. Girls may be referred to a Paediatric Adolescent Gynaecologist to have this arranged.

It is most commonly performed under a general anaesthetic. Post-operatively topical estrogen cream will be continued for one to two weeks and following this, an emollient for 6 to 12 months.

Referrals

Adolescent Gynaecology Clinic, Children's Hospital Westmead
Phone 9845 2446
Fax 9845 2517
Email SCHN-CHW-AMU@health.nsw.gov.au

Paediatric, Adolescent Gynaecologists who work at the Adolescent Gynaecology Clinic

- Dr Monique Atkinson
- Dr Araz Boghossian
- Dr Jinny Foo
- Dr Bronwyn Milne

References

Bacon, J. L., M. E. Romano and E. H. Quint (2015). "Clinical Recommendation: Labial Adhesions." J Pediatr Adolesc Gynecol 28(5): 405-409.

Schober, J., L. Dulabon, N. Martin-Alguacil, L. M. Kow and D. Pfaff (2006). "Significance of topical estrogens to labial fusion and vaginal introital integrity." J Pediatr Adolesc Gynecol 19(5): 337-339.