



# An uncommon cause of vulval pruritus in childhood: Lichen sclerosus

To the Editor,

Lichen sclerosus (LS) is one of the rare causes of vulvar pruritus in childhood.

The disease which may involve the vulva, penis and anus in the genital region is observed more commonly in women compared to men (1, 2). In this article, a pediatric patient who was diagnosed with LS in our outpatient clinic is presented and literature data are discussed. A 9-year old girl was referred to our outpatient clinic because of pruritus in her genital region which had been lasting for one year. She had presented to various physicians because of this complaint in the last one year. She used various ointments with diagnoses of vitiligo and fungal infection. However, the lesions continued. She had no known disease. On dermatological examination, a white, atrophic plaque lesion which started in the lower border of the mons pubis, involved the labia majora and extended to the anus was observed (Figure 1). Punch biopsy was obtained from the plaque with prediagnoses of LS and lichen planus. On histological examination of the biopsy obtained, hyperkeratosis in the epidermis, mild erasing in the rete, vacuolar disruption in the basal layer, extensive homogenization in the papillary dermis and chronic inflammation in the reticular dermis was observed and the diagnosis of LS was supported (Figure 2). The laboratory tests ordered were found to be normal. The patient was consulted to child psychiatry and sexual abuse was excluded. The patient was prescribed topical corticosteroid ointment and oral antihistaminic and asked to come back for follow-up visits. Lichen sclerosus is an inflammatory skin disease which involves the skin and mucosa. It was described by Hallopeau for the first time in 1887. In the childhood, it has been reported with a rate of 1/900 in adolescent girls and with a rate of 1/200 in boys. Involvement of the anogenital region is observed with a rate ranging between 85% and 98% (3, 4). Clinically, it starts as erythematous macules and papules in the genital region. In time, white, atrophic, bright plaques are observed. Hemorrhage, hyperkeratosis, erosions and bullae may be observed secondarily in the lesions (5). Our patient was a 9-year old girl. There was involvement of vulva and anus and hemorrhages secondary to itching developed. In the childhood, dermatitis, fungal infections and bacterial infections are the common causes of vulvar pruritus. Lichen sclerosus is observed rarely and is generally confused with other diseases (6). Sexual abuse is also included in the differential diagnosis because of observation of ecchymoses and petechial foci in the genital region. Referral of these patients to dermatology clinics is important in terms of true diagnosis (7). Other diseases in the differential diagnosis include oxyuriasis, psoriasis, contact dermatitis and morphea (4). The differential diagnosis of these diseases can be made by a careful physical examination and biopsy. Lichen sclerosus disrupts the anatomical structure because of formation of scar which develops in time as well as pruritus and hemorrhage and may lead to vaginal narrowing, difficulty in miction, constipation and phymosis (5). In addition, development of malignancy on atrophic lesions has also been reported (5-7). In our patient, the lesions had been present for one year. No problem except for pruritus and occasional hemorrhage could be found. The clinical course of lichen sclerosus is variable. There is a wrong belief that improvement occurs by adolescence in the majority of the patients. However, it was found that the disease did not regress with adolescence in one study and it was stated that the patients should be followed up carefully in terms of development of malignancy (8, 9). Therefore, in recent years, it is thought that early diagnosis and treatment is important in these patients. In treatment, use of strong topical steroids is recommended in the first step. It is thought that this treatment is safe and efficient. In recent years, use of calcineurin inhibitors has come to the forefront because of the risk of atrophy with topical corticosteroids (10). Other treatment options include topical testosterone propionate, topical retinoid and UVA1. Surgical methods are used in presence of problems and malignancy. We also initiated topical corticosteroid ointment treatment which is the first-line treatment in our patient. We informed the patient about the problems which may develop and recommended regular follow-up.

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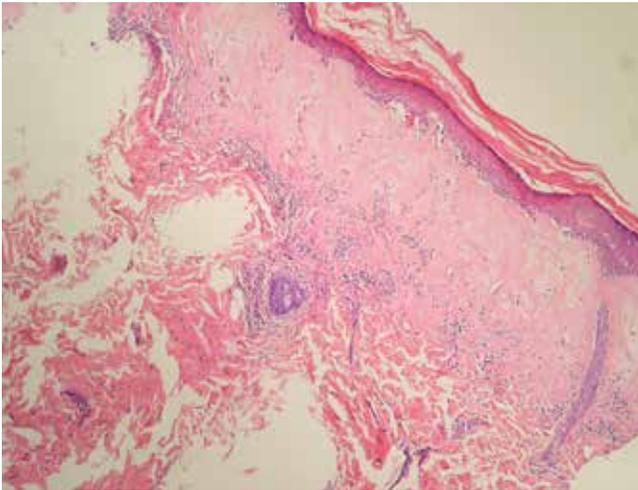
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**Figure 1.** White, atrophic plaque lesion in the vulvar and perianal region



**Figure 2.** Hyperkeratosis in the epidermis, mild erasing in the rete, vacuolar disruption in the basal layer, extensive homogenization in the papillary dermis and chronic inflammation in the reticular dermis (Hematoxylin-Eosine x100)

Conclusively, LS should be considered in the differential diagnosis of vulvar pruritus observed in childhood. In cases which continue for a long time and show resistance to treatment, biopsy should be obtained in terms of malignancy. Early diagnosis will prevent future problems.

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## References

1. Baskaramoorthy S, Bygum A. Lichen sclerosus can also be seen in children. *Ugeskr Laeger* 2012; 174: 1309-10.
2. Patrizi A, Gurioli C, Medri M, Neri I. Childhood lichen sclerosus: a long-term follow-up. *Pediatr Dermatol* 2010; 27: 101-3.
3. Ergin Ş. Liken sklerozus. *Turk J Dermatol* 2012; 6: 27-34.
4. Smith SD, Fischer G. Paediatric vulval lichen sclerosus. *Australas J Dermatol* 2009; 50: 243-8.
5. Welsh B, Howard A, Cook K. Vulval itch. *Aust Fam Physician* 2004; 33: 505-10.
6. Young SJ, Wells DL, Ogden EJ. Lichen sclerosus, genital trauma and child sexual abuse. *Aust Fam Physician* 1993; 22: 729-33.
7. Hassanein AM, Mrstik ME, Hardt NS, Morgan LA, Wilkinson EJ. Malignant melanoma associated with lichen sclerosus in the vulva of a 10-year-old. *Pediatr Dermatol* 2004; 21: 473-6.
8. Powell J, Wojnarowska F. Childhood vulvar lichen sclerosus. The course after puberty. *J Reprod Med* 2002; 47: 706-9.
9. Smith SD, Fischer G. Childhood onset vulvar lichen sclerosus does not resolve at puberty: a prospective case series. *Pediatr Dermatol* 2009; 26: 725-9.
10. Boms S, Gambichler T, Freitag M, Altmeyer P, Kreuter A. Pimecrolimus 1% cream for anogenital lichen sclerosus in childhood. *BMC Dermatol* 2004; 4: 14.