

## Case Report :

# Bilateral Vulvar Abscess in an Infant – an unusual occurrence

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### Abstract:

Abscess of the Bartholin's gland is rare in prepubertal children as the gland is not fully developed in them. There are very few reports of vulvar abscess in infants but none of them were bilateral. We report a rare case of bilateral vulvar abscess in an infant. To the best of our knowledge, probably the first one in English literature.

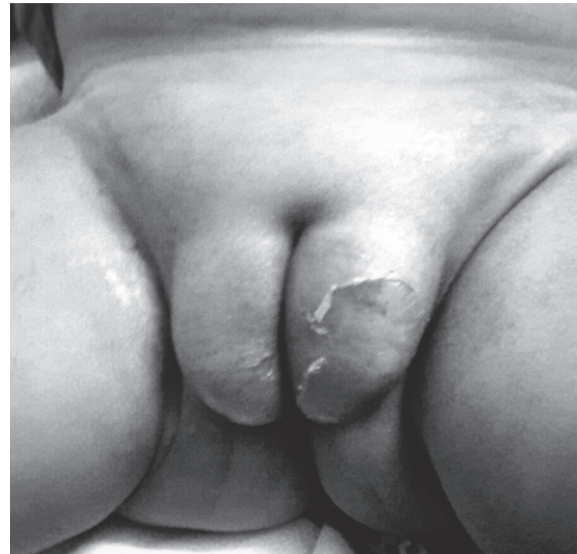
**Key Words:** Bartholin's gland, Vulvar Abscess, Infant, Bilateral, prepubertal

### Introduction:

Vulvar abscess are common in women of reproductive age group. However, they are extremely rare in children. So far only six cases of vulvar abscess have been reported in infants<sup>1</sup> and all these were unilateral. We report a case of bilateral vulvar abscess in an infant.

### Case Report:

An eight month old female child presented to us with swelling in the genital region of one week duration. Swelling started on both labia majora simultaneously, followed by fever after two days. She had difficulty in sitting. There was no history of trauma, vaginal discharge or difficulty in micturition. It gradually increased in size, with increase in the intensity of fever. She also developed swelling & redness of the skin overlying the inguinal nodes.



**Fig. 1 Bilateral vulvar abscess**

On clinical examination, child was alert and cooperative weighing 8 kg and had no evidence of infection elsewhere. She was febrile with normal vital parameters. Local examination revealed diffuse swelling involving the labia majora bilaterally being prominent on the lower aspect. The swelling was tender, erythematous with pus pointing on the lower aspect. The inner aspect of the labia revealed an oval prominence. Her genital hygiene was good and she had no vaginal discharge or trauma. There were two prominent swellings in the inguinal region one on each side. The skin over the swellings was erythematous. There were lymph nodes measuring about 4×2 cm on the right side and

3x2 cm on the left side. The nodes were tender & fluctuant. There were other smaller lymph nodes on both sides. Abdomen was soft, non tender with no palpable mass. Other systems were normal.

Lab investigation revealed hemoglobin of 8.5 g/dl, total leucocyte count was 29000/mm<sup>3</sup> with neutrophilic predominance. Perineal ultrasound revealed moderate subcutaneous edema with multiple small loculated fluid collections suggestive of an abscess. Sonography of the lower abdominal wall overlying the lymph nodes also showed pus collection.

Incision & drainage of the vulvar abscess was done and about 30ml pus was drained from both the sides. Pus was also drained from the lymph node abscess. Gram stain of the pus revealed gram positive cocci in clusters. Bacterial culture of the aspirated fluid revealed coagulase negative staphylococcus. Child was started on parenteral Ampicillin and cloxacillin. The child recovered in one week without any complications.

#### Discussion :

Vulvar abscess are caused by infection of the vulvar glands. There are two major vulvar glands underlying the vestibule. They are Bartholin gland also referred to as greater vestibular gland and the Skene or paraurethral glands. These glands begin to function at puberty and their function is to maintain the moisture of the vaginal mucosa's vestibular surface. Bartholin gland abscess are usually secondary to obstruction of the Bartholin's duct. The resultant fluid collection and infection results abscess formation. Bartholin's duct cyst or gland abscess is common in the women of reproductive age group. 2% of women develop cyst or abscess with peak incidence in the 20 to 29 years age group. Beyond this period gradual involution of the Bartholin gland is known to occur<sup>2</sup>. However it is very rare in Pediatric age group as the glandular component is not fully developed until puberty. In women of reproductive age group the most common organism causing vulvar abscess is methicillin-resistant *Staphylococcus aureus*

(MRSA) <sup>3</sup>. In children it has been found that these abscesses are usually caused by *E.coli*<sup>4</sup>. There are also reports of abscess being caused by *Klebsiella pneumoniae* & *Peptococcus*.

Bartholin cyst or abscess is very rare in paediatric age group. Only six cases of vulvar abscess have been reported in infants - two of them being neonates<sup>5, 6</sup>. All of the reported cases are unilateral. There are reports of abscess in children with anovestibular fistulas and inflammatory bowel disease<sup>7</sup>. Rectovaginal fistulas may present with vulvar abscess<sup>8</sup>. With underlying anatomical defects or systemic illness, vulvar abscess may be recurrent<sup>9</sup>.

Vulvar abscess should also be differentiated from infection of hair follicle, sweat and sebaceous glands. An infected hematoma, lipoma, leiomyoma may also mimic a vulvar abscess. Therefore it is important to know if there was any history of trauma or pre-existing swelling in the vulva. In infant and young children we should also keep in mind the possibility of inguinal hernia and hydrocoele of canal of Nuck. Incision and drainage with appropriate antibiotic therapy is the mainstay of treatment. In case of recurrent abscess management of underlying condition along with abscess drainage will be required. Marsupialisation of cyst wall is usually done in adults with recurrent abscess.

#### Conclusion :

Vulvar abscess although rare in infants should be included in differential diagnosis of labial swellings. To the best of our knowledge ours is the first reported case of bilateral vulvar abscess in pediatric population.

#### References:

1. Jitendra K. Singh, Arunagiri Viruthagiri, Jagdish Sadasivan. Bartholin Gland Abscess- a rarity in infants and children. *Curr Pediatrics Res* 2010; 14(1): 63-64
2. Kaufman RH. Benign diseases of the vulva

- and vagina. 4th ed. St Louis: Mosby, 1994:168-248
3. Thurman AS, Satterfield TM, Soper DE. MRSA as a common cause of vulvar abscess. *Obstet Gynecol.* 2008; 112:538-544
  4. Kubitz R, Hoffman K. Bartholin's gland abscess in an infant. A case report. *J Reprod Med* 1986; 31:67-9.
  5. Sherif El Kady, MD; Ahmed Al Zahrani, MD; Roman Jednak, MD; Mohamed El Sherbiny, MD CUAJ. Bartholin's gland abscess in a neonate: a case report. *Can Urri Assoc J.* 2007 Jun ;1(2):117-119
  6. Ernst EA, Weller P, Karch SB. Bartholin's gland abscess in infancy. *Pediatr Infect Dis J* 1988;7:526-7
  7. Tolia V Am J. Perianal Chron's Disease in children and adolescens. *Gastroentology* 1996 May;91(5):992-6
  8. Haydar A Naseer, Vanessa Maron, Mendes. Complicated Rectovaginal fistula secondary to bartholin cyst infection. *Journal of Obstetrics & Gynaecology Reaserch* 2014 Jan; vol 40: 1141-1144
  9. Bicette R, Tenjarla G, Kugathasan S, Alazraki A, Haddad L. A 14 year old girl with recurrent vulvar abscess. *J Pediatr Adolesc Gynecol.* 2014 Aug; 27(4):e83-6. Doi: 10.1016/j.jpag.2013.07.010. Epub 2013 Nov 20

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