



## Concealed Glans Hemangioma: Rare Presentation

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### Abstract

*Hemangioma involving glans penis is extremely rare, usually present in first 2 decade of life as swelling, papule, nodule or due to its complication. Urologists are in dilemma whether to use surgical management in penile hemangioma. We hereby, report a case of concealed hemangioma of glans penis presented with voiding symptoms due to severe phimosis in elderly 71 year old male, diagnosed intra operatively and treated by circumcision with concomitant excision of hemangioma. Post-operative course was uneventful and at 6 months follow up there was no recurrence, no symptom and with excellent cosmetic results. We believe surgical excision should be choice of treatment in such cases.*

**Keywords:** Circumcision, Concealed, Glans, Hemangioma, Phimosis.

### Introduction

Hemangioma of glans penis is extremely rare<sup>[1]</sup> and reported scarcely in available literature<sup>[2]</sup>. It usually present in first two decade of life<sup>[3]</sup>, usually asymptomatic or present as swelling or papules on glans or due to it complication<sup>[2,4,5,6]</sup>. Various procedures can be used for treatment of hemangioma as there is no gold standard treatment modality because of its rarity<sup>[1, 3]</sup>. We are reporting concealed hemangioma of glans penis in elderly presenting as voiding lower urinary tract symptoms due to severe phimosis treated by concomitant surgical excision with circumcision.

### Case History

Seventy one years old male presented with voiding lower urinary tract symptoms since 2 years. On examination, he had phimosis with firm nodule underneath the prepuce. There is no history of trauma or any operation in the past.

After pre-operative evaluation he was planned for circumcision and if required biopsy under anesthesia. On splitting the phimotic prepuce, to our surprise, there was a red cherry coloured lesion near the urethral meatus of size 2 x 2 cm, non-pulsatile, non-compressible, not involving urethra and clinically suggestive of hemangioma (fig 1).

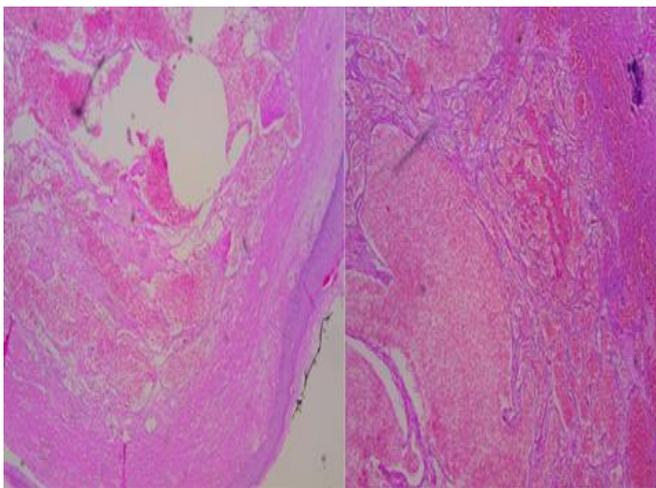
Circumcision and concomitant surgical excision was done after placing the catheter under spinal anesthesia. On cystoscopy, urethra was not

involved and there was no other hemangioma in urethra and bladder. No other similar lesion elsewhere on the body. Histopathology reveals hemangioma with thrombosis and neovascularization of thrombus (fig 2)

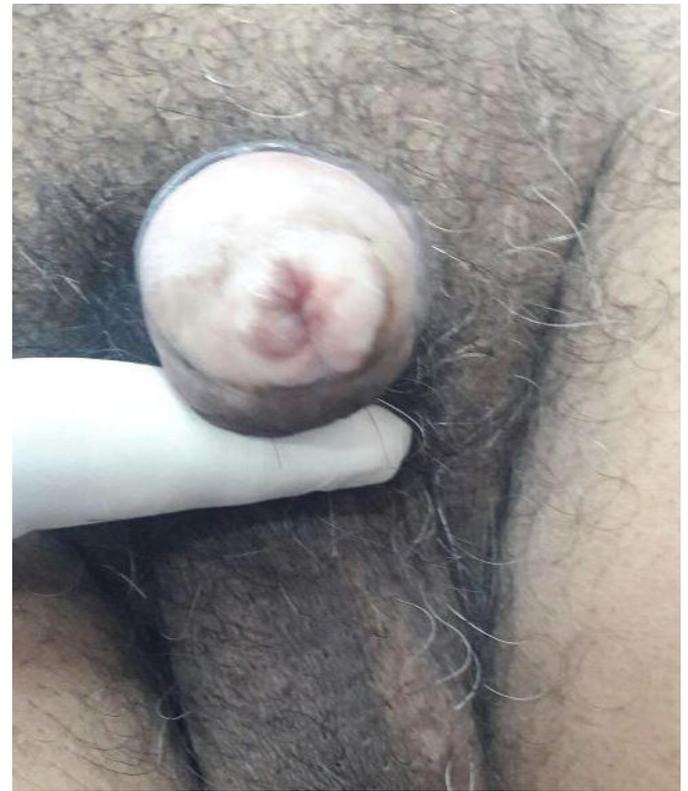
There was no abnormal scarring or disfigurement on 6 month follow up. (fig 3)



**Figure no 1:** Post circumcision, hemangioma of glans penis with feeding tube in situ



**Figure no 2:** Microscopic picture (H & E stain) showing stratified squamous epithelium with underlying dilated vessels lined by flattened endothelium engorged with blood.



**Figure no 3:** Post surgery at 6 months followup

### Discussion

Hemangiomas are most common benign lesions resulting from proliferation of immature capillary vessels<sup>[1]</sup>. It is rarely found in genitalia and constitutes only 1-2 % of all hemangiomas<sup>[4]</sup>. It is mostly reported in pediatric age group and rarely seen in adults<sup>[7]</sup>. Clinical presentation of hemangioma is usually asymptomatic<sup>[2]</sup> or it may present as bright red non-compressible papule/nodule or plaque when fully developed<sup>[8]</sup> or as a complication i.e. pain, ulceration and bleeding. Our patient is 71 years old male and presented as voiding symptoms due to tight phimosis with palpable nodule underneath as concealed hemangioma, which has not been reported in literature yet. Etiology of hemangioma is unknown but they are thought to be congenital malformation, vascular neoplasia or may simply developed after trauma<sup>[5]</sup>, herniation of cavernous body tissue, revascularization of previous hematoma. The exact etiology in our patient is unknown. Glans hemangioma is clinical diagnosis.<sup>[6,8]</sup> Imaging studies are useful to identify and delineate the extent of hemangioma

as well as detection of any associated anomalies<sup>[7]</sup>. In our case it is intra-operative diagnosis as it was concealed. Due to rarity and less number of reported cases, there is lack of standard therapeutic protocol<sup>[3]</sup>. Treatment decision has to be taken into consideration based on location of lesion, size, cosmetic outcome and cost of treatment<sup>[7]</sup>. In adults choice of treatment in glans penis are surgical excision, laser therapy, sclerotherapy, electrofulgration and cryotherapy<sup>[11]</sup>. Laser provide good cosmetic outcome but it is costly and not easily available<sup>[7,9]</sup>. Sclerotherapy is less expensive and more readily available<sup>[8]</sup> but requires repeated injections and may cause cutaneous necrosis, ulceration and hypopigmentation in intra lesional therapy<sup>[11]</sup>.

Surgical excision remains a good option for large and multiple lesions<sup>[7]</sup> or it is also an option especially in peripheral hospitals where infrastructure is inadequate<sup>[8]</sup> and surgical excision is preferred in case of painful hemangioma and for cosmetic reasons.<sup>[10]</sup> Results are quite satisfactory with good surgical planning and technique<sup>[7]</sup>. Excision of hemangiomas is treatment of choice in lesions where circumcision is religious or traditional necessity<sup>[11]</sup>. Role of cystoscopy is to rule out associated urethral and bladder vascular malformation<sup>[6]</sup>. Circumcision was planned for phimosis and biopsy if necessary for underneath nodular swelling. Cystoscopy intra-operatively was normal.

Gong Cheng et al operated 6 patients of penile hemangioma with surgical excision without any complications. They found surgery is safe, radical curative procedure and most effective way to address penile hemangioma<sup>[8]</sup>.

At six months follow up, our patient is cosmetically satisfied and relieved of presenting symptoms.

### Conclusion

Surgical excision of hemangioma with circumcision is treatment of choice when patient had concealed hemangioma due to tight phimosis.

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