



Inflammation and infection

Late onset penile abscess after 4 years from hyaluronic acid injection. A rare case report

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ABSTRACT

Penile Augmentation is a debatable issue among men community. Even though Self-conviction of penile size affected by many Factors. Many men seek it just to get confident. Although fillers gain popularity in soft tissue augmentation nowadays, there is no enough study trace these elements as long term follow up in this field. To our knowledge, we describe a rare case of late onset abscess after penile augmentation using hyaluronic acids (HAs) after 4 years without any risk factors.

Introduction

Size of the penis is a matter of pride for a lot of men through history. Even today, men often feel a need to enlarge their penises to improve their self-esteem or to satisfy and/or impress their partners as well as enhance sexual pleasure.^{1–4}

Case presentation

A 41 -year-old gentleman presented to our clinic with acute onset penile pain and discharge that progress over a week. Patient reported that he had hyaluronic acid (HAs) injection for penile augmentation four years ago in private clinic. No chronic medical illness or recent trauma. Neither voiding symptoms nor symptoms suggesting Sexually transmitted disease (STD) reported. On examination his penile shaft showed edematous, erythematous and necrotic tissue along with pus exudate came from both right and left lateral aspects (Fig. 1).

Patient underwent immediate surgical exploration and tissue culture was sent. Intraoperatively we encountered extensive necrotic tissue involved buck's fascia from midshaft down to suspensory ligament proximally, no urethral involvement identified, although we used a circumcising incision, patient had a significant shaft skin defect difficult for primary repair. (Fig. 2).

Postoperatively patient resumed his normal activity and voided spontaneously. He received two weeks course of oral antibiotics based on his culture which revealed (*Staphylococcus aureus*).

Frequent wound dressings done followed by delayed penile reconstruction in the form of split thickness skin graft. The operation went smooth and postoperative course was uneventful. Urethral catheter removed on second postoperative day and patient voided spontaneously.

Patient followed up in our clinic with complete resolution (Fig. 3).

Discussion

Different materials have been tried by medical and nonmedical personnel to be injected in the subcutaneous tissue of the penis to achieve penile enlargement.¹ Paraffin, mineral oil, silicon, petroleum jelly, subcutaneous stone implantation, Vaseline and autologous fat implantation are some of the various materials that have been tried.^{1,2}

Filler injections have gained popularity for soft tissue augmentation during the past few years. In fact they are relatively safe, effective, less invasive, and less expensive compared to the surgical procedures.^{3,4}

Most of filler Materials studied well in areas like face. Unlike penis which has bigger site area and required higher dose and well-established technique for injection.³

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Fig. 1. Preoperative findings.



Fig. 2. Intraoperative skin defect.



Fig. 3. Healing after split-thickness skin graft.

Two main categories of injectable fillers exist: Temporary products persisting for a few months to years, and permanent.⁵

Hyaluronic acid (HAs) and polylactic acid (PLA) fillers are commonly used soft tissue fillers that are regarded as temporary.³

(HAs) seems to be an ideal filling material for soft-tissue augmentation because it is biocompatible, non-antigenic, nonpyrogenic, noninflammatory, nontoxic, easy to use, stable after injection, nonmigratory, last for reasonable time, but reabsorbable and natural looking.^{4,5}

(HAs) will depend on what we call as stabilization process which based on water content of the targeted tissue.^{4,5}

The main limitations of penile augmentation using injectable (HAs) is not the efficacy, but the difficulties associated with the injection technique and the poor learning curve for juniors.⁴

Also, some authors still mention the persistence of the product in a more watery appearance 1 year after injection, others do not identify it after a period of 9 months.⁵

Penile reactions to (HAs) include redness, intermitting swelling, pruritus, and nodules leading to abscess formation.⁵ They used to develop several days up to 1 year after injection.⁵

By understanding (HAs) nature, it's uncommon to anticipate any complication after long period of time to happen as (HAs) diminished in the targeted tissue.

Here we report a unique case that showed unusual late onset complication that happened after 4 years from injection without any apparent risk factor.

When we looked in the literature, we found that the longest clinical follow up to date for penile augmentation using (HAs) injection was 18 months by Yang and his colleague.³

Thus, we need to have more randomized trials to assess the efficacy and safety of (HAs) in the penis with longer follow up.

Conclusion

This case report describes unusual late complication of penile augmentation using injectable (HAs). Because of the increasing number of patients seeking penile augmentation, urologist should pay more attention as it may converted to medical distress after few years without alarming.

Declaration of competing interest

The authors have nothing to disclose.

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