

# Penile gangrene as a sign of uncontrolled diabetes mellitus

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Accepted 23 January 2016

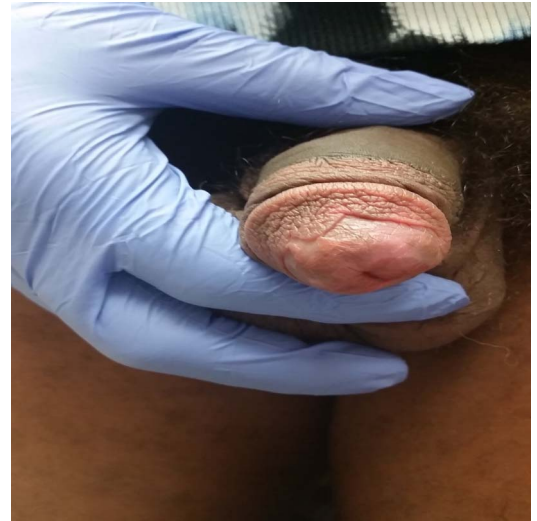
## DESCRIPTION

A 33-year-old African-American man with a previous medical history of type II diabetes mellitus and tobacco abuse presented to our outpatient clinic because of a penile lesion. The lesion started 1 month prior to presentation. The patient reported a history of minor injury while zipping his pants, which resulted in slight redness at the tip of his glans penis, progressing to blackish discolouration. He was sexually active with one female partner and reported infrequent oral sex. He had no penile discharge, no pain and no urinary symptoms.

His diabetes mellitus was diagnosed 3 years prior to presentation. He was non-compliant with oral hypoglycaemic medications. Examination showed normal vital signs and superficial dry gangrene with no drainage (**figure 1**). He had no inguinal lymphadenopathy. The remainder of his physical examination, including cardiovascular examination, was normal. Lab investigations showed haemoglobin A1c of 12.9% (reference 0–5.7%). Comprehensive metabolic panel, complete blood count and urinalysis were normal.

The patient was started on insulin therapy and frequent local wound care with silver sulfadiazine. Two months later, his lesion totally resolved (**figure 2**). Haemoglobin A1c 4 months later was 5.8%.

Penile gangrene that results from vascular trauma is a rare complication of diabetes mellitus. Penile calciphylaxis resulting from vascular calcification in patients with end-stage renal disease and diabetes is well established.<sup>1</sup> Management of penile gangrene depends on the cause and includes conservative



**Figure 2** Resolved penile gangrene after treatment.

measures.<sup>2</sup> Surgical intervention may be needed in patients who experience superimposed complications such as infections, extension of the gangrene or failure of conservative management.<sup>3</sup>

## Learning points

- ▶ Penile gangrene can result from vascular trauma in patients with uncontrolled diabetes mellitus.
- ▶ Superficial penile gangrene is usually reversible with local wound care and optimal diabetic control.

**Contributors** SAH took care of the patient during hospital admission, reviewed the literature and wrote the manuscript. RAH followed the patient in the outpatient setting and helped write the manuscript. FA and GB reviewed the literature and the contents of the manuscript.

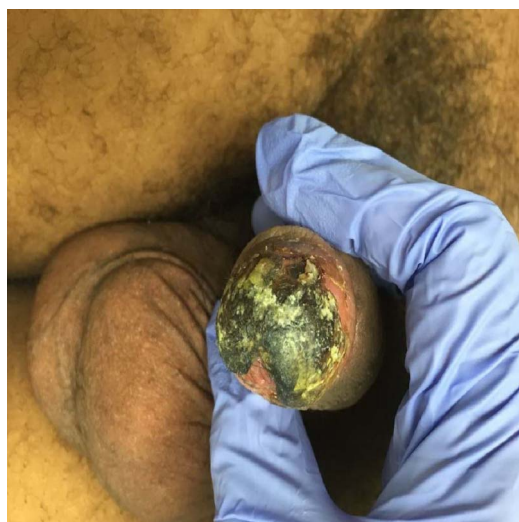
**Competing interests** None declared.

**Patient consent** Obtained.

**Provenance and peer review** Not commissioned; externally peer reviewed.

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**Figure 1** Penile gangrene before treatment.



**To cite:** Al Hadidi S, Haddad RA, Abed F, *et al*. *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2015-214303

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