'Carbuncle in diabetes': a problem even today!

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DESCRIPTION

A 65-year-old man presented with fever and painful swelling at the back for last 2 weeks. His prior history was significant for long-standing type 2 diabetes of 20 years duration and systemic hypertension. Clinical examination showed red, swollen, painful carbuncle with gangrenous patch at the centre and multiple pus points (figure 1). Investigations revealed elevated white blood cell count with neutrophil predominance and high random blood sugar, 340 mg/dL (normal, <140 mg/dL). He was started on insulin and good glycaemic control was achieved. Aggressive debridement of the local affected area was done. Tissue culture was positive for Staphylococcus aureus and he was treated with amoxicillin and clavulanic acid to which he responded well. On follow-up, his debrided wound was granulating well. Carbuncle, also called as infective gangrene of skin and subcutaneous tissue, is most commonly caused by S. aureus that usually starts as a furuncle/boil around the root of a hair follicle. In an appropriate setting like uncontrolled



Figure 1 Classic appearance of a carbuncle with multiple pus points, necrotic centre and surrounding cellulitis with induration.

diabetes (as in our patient) or other immunocompromised states, the infection may spread in the subcutaneous plane and burrow upwards forming multiple pus points or sinuses. The diagnosis is frequently delayed as it occurs in the back or nape of neck and hence may not be visualised easily. Management principles involve early aggressive surgical debridement, strict diabetes control and appropriate antibiotic cover.² If left untreated, it can even precipitate diabetic ketoacidosis and cause death. However, in a case series of 21 patients, early treatment showed no mortality.³

Learning points

- Carbuncles are not uncommon even in this postantibiotic era especially in those with uncontrolled diabetes.
- ► Early clinical diagnosis and prompt surgical management is rewarding.

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