Figure 1 — Site of the peritoneal dialysis catheter extrusion.

thinning of the skin had been occurring for weeks before the ulceration occurred. Both ends of the exposed catheter segment were buried under the skin and covered with granulation tissue. The surrounding skin was dark because of hyperpigmentation (Figure 1). No signs of active inflammation or infection and no peritonitis were evident.

Two similar cases have previously been reported (1,2). In one case, a small segment of the catheter was exposed by skin ulceration (1); in the other, the catheter was exposed after a period of gradual thinning of the skin (2). Our case resembled the latter one. The mechanism causing the gradual thinning of the overlying skin and eventual ulceration is unclear.

We suggest a mechanism of “transepidermal elimination.” This is a mechanism in which foreign bodies or altered tissue are eliminated from the dermis (3). Irritating materials in the dermis can stimulate the epidermis to grow down like a tongue, making contact with the foreign body or the altered dermis, surrounding it. The foreign body captured by the epidermis is moved superficially as keratinocytes mature, and it is eventually expelled from the skin (3). We hypothesize that the catheter in the subcutaneous tunnel had pressed against the dermis above it, causing alterations in the dermis. The altered dermis might then have initiated transepidermal elimination of the catheter.

We suggest that patients with shallow subcutaneous tunnels, with little subcutaneous fat, or with continuous elevation of intra-abdominal pressure may be at increased risk for this rare complication.

DISCLOSURES

The authors have no financial conflicts of interest to declare.

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An Unusual Case of Peritoneal Dialysis Catheter Extrusion

Editor:

We report an unusual incident of spontaneous exposure of a PD catheter through the skin.

A 66-year-old man on peritoneal dialysis for 4 years was seen in clinic. It was noted that a segment of his catheter that had originally been in the subcutaneous tunnel was now exposed through an ulcer in the skin. Progressive

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