Dermatitis artefacta in children and adolescents

Celia Moss

Abstract

Dermatitis artefacta (DA) is skin damage caused deliberately and secretly by the patient, and presented as skin disease, for covert secondary gain. In children DA must be distinguished from skin damage inflicted by others (abuse and fabricated or induced illness). Excluding the possibility of rare skin disease is difficult for paediatricians, who may feel unable to dismiss other dermatological diagnoses with authority. However there are usually positive diagnostic clues in the history, such as previous unexplained illness or psychosocial difficulties alleviated by the DA. Examination may reveal either a characteristic distribution or particular morphology of the lesions which will suggest the diagnosis. Most of the published cases are adults, in whom DA usually reflects significant psychological needs, or conscious deception for material gain. Children with DA have psychological needs too, but the spectrum of causes is different. At one end, normal children sometimes inflict lesions on themselves experimentally or in response to peer pressure, then find themselves caught up in a medical scenario. At the other, children trapped in an intolerable situation may resort to DA as a cry for help. Skill and sensitivity are required to provide an "exit strategy" or to divert a dermatological presentation to the appropriate agency such as clinical psychology or child protection.

Keywords child abuse; deception; deliberate self-harm; factitious disorder; Munchausen syndrome; psychosocial factors; skin care

What is (and is not) dermatitis artefacta?

Dermatitis artefacta (DA) is skin damage caused deliberately and secretly by the patient, and presented as skin disease. Seen most frequently in adolescent girls, it also affects children, teenagers and adults of both sexes, but has not been reported below the age of 8 years. DA is well-recognised by dermatologists, but less well known to paediatricians, who are more likely to suspect abuse than self-inflicted lesions.

The nature of DA can best be understood by considering the differential diagnosis, which includes the following:

- Genuine skin disease
- Factitial disease inflicted by others:
  - Abuse
  - Fabricated or induced illness (Munchausen by proxy)
- Other self-inflicted factitial disorders, which may be carried out secretly, but which the child usually acknowledges and does not pretend are skin disease:
  - Excoriations secondary to itching
  - Habit e.g. lip-licking, nail picking
  - Compulsion e.g. trichotillomania
  - Self-harm e.g. "cutting"
  - Psychotic self-mutilation
- Munchausen syndrome: this is a more adult condition aimed positively at engaging with and challenging the medical profession, rather than evading a psychosocial difficulty.

As with other simulated illnesses, the prognosis is variable and depends on the underlying causes. The manifestation is always a visible change in the skin, commonly discolouration, inflammation, blisters, petechiae or abrasions.

Making a clinical diagnosis

The first priority is to establish whether or not the condition is DA. Of course the patient knows the answer, but asking directly will elicit a straight denial which is counter-productive. Eventually, the patient may acknowledge tacitly the possibility of self-inflicted lesions, but usually uncertainty remains. Doctors will be curious to know exactly how the lesions are produced, but this may never be disclosed and there is no need to pursue the precise cause.

Clues from the history include the following:

- Previous unexplained symptoms such as headache, abdominal pain or difficulty walking, which resolved as mysteriously as they appeared.
- "Hollow history" of the lesions — "they just appear".
- Personal experience of the rewards illness can bring (Box 1).
- Contact with an illness role-model. Children whose experience is limited to viral rashes may use pen or make-up to simulate a rash, easily removed with an alcohol wipe. A child presented to our clinic with superficial linear grazes on all four distal limbs, resembling her mother's linear morphoea on one arm. Older children share ideas on the internet: try googling "salt and ice burn craze" or "aerosol challenge craze".
- Unhappiness following a recent significant change in circumstances such as family break-up, geographic relocation or change of school.
- Social difficulty alleviated by the condition.

Rewards of the invalid role

"William considered that the microbe world was treating him unfairly. Mild chickenpox would be, on the whole, a welcome break in the monotony of life. It would mean delicacies such as jelly and cream and chicken. It would mean respite from the pressing claims of education. It would afford an excuse for disinclination to work for months afterwards. William was an expert in the tired look and deep sigh that, for many months after an illness, would touch his mother's heart and make her tell him to put his books away and go out for a walk. No-one could rival William in extracting the last ounce of profit from the slight indisposition."

Extract from Just William by Richmal Crompton

Box 1

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- Possible sexual abuse — young victims may resort to DA to make themselves unavailable or unattractive, or to draw attention to their plight.

Clues from the physical examination include the following:

- Demeanour: parents are naturally distressed, children surprisingly less so, sometimes showing a Mona Lisa smile (smirk) and avoiding eye contact.
- Physical signs may be inconsistent with dermatology: scaly desquamation follows erythema and does not "just appear" unless it is a layer of glue (Figure 1). Erythema sparing flexures or toe webs is usually exogenous (Figure 2).
- Un-natural colours can be due to exogenous pigments such as nail-varnish or other cosmetics.
- Distribution: self-inflicted lesions only occur on accessible parts of the body, particularly the dorsum of the non-dominant hand or forearm and the belly (Figure 3). Lesions on lips, breasts or genitalia may reflect serious emotional turmoil relating to sexuality.
- Specific lesional morphology:
  - Geometrically shaped superficial grazes, especially broad linear lesions and multiple round lesions of uniform size are most common (Figure 4).
  - Trickle lesion: the mouth of a bottle of bleach or other caustic liquid held against the skin causes a very characteristic circular lesion (Figure 5) with a central blister, a surrounding ring of unblistered erythema where the skin was relatively protected by pressure from the bottle neck, and a line of damage extending downwards due to a trickle of caustic fluid. The blister contents may be congealed or highly alkaline depending on the chemical. Such lesions may be misdiagnosed by the inexperienced as target lesions of erythema multiforme.
  - Tiny petechial haemorrhages confined to a circular area around the mouth and chin are caused by sucking on a beaker to create a vacuum.
  - A "love bite" or "hickey" on the neck is a suction artefact caused by another person; on the arm such lesions may be self-inflicted especially if multiple (Figure 6.).
  - Desquamation can be simulated by glue.
  - Scabs can be mimicked by glue mixed with blood. There have been several cases of "chronic lip dermatitis" caused by applying glue to the lip (Figure 7).

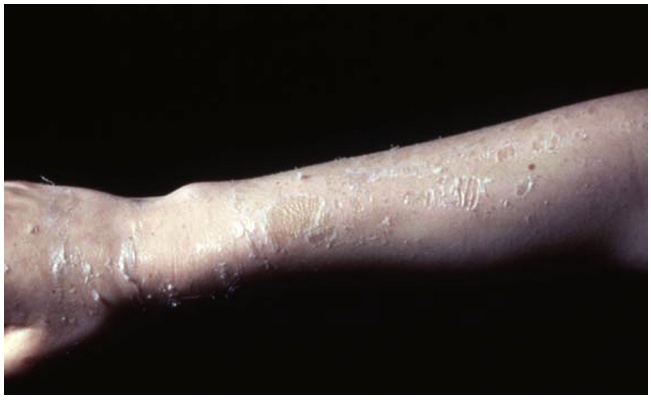

Figure 1 A convincing simulation of desquamating skin, achieved with glue.

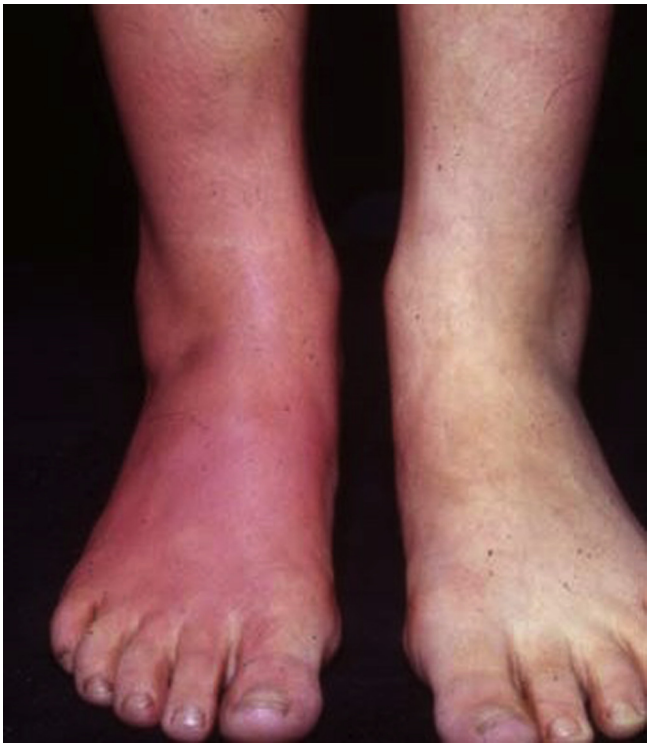

Figure 2 Erythema sparing web spaces is usually exogenous, in this case applied as make-up.

  - Bullae can be created by spraying the skin with an aerosol (such as deodorant) held close (bullous cryothermic dermatosis) (Figure 8). Lesions are often multiple, confined to accessible areas, and at different stages, including erythema, scabbing and post-inflammatory pigment change. Fresh lesions may have fine, white powdery deposit and a tell-tale fragrance.
  - Lozenge-shaped blisters and inflammation measuring approximately 10 × 13 mm represent bullous

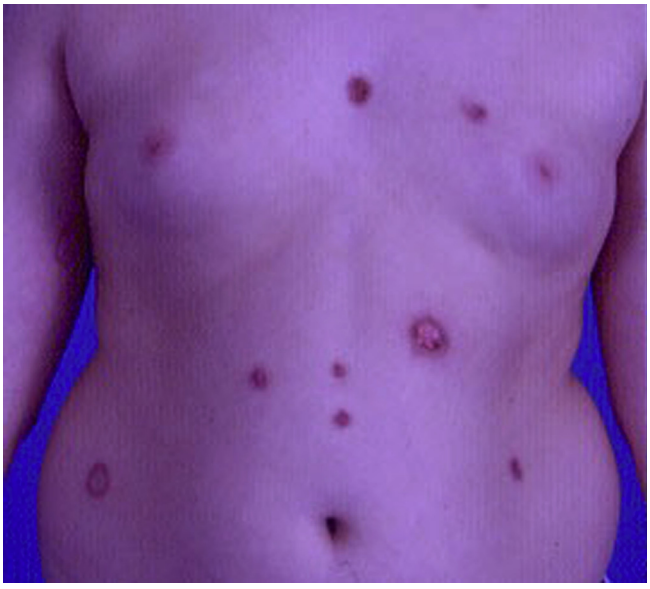

Figure 3 Superficial erosions distributed only in accessible areas of the body may be DA.