
Letters to the Editor

Keloid at the Venipuncture Site

Keloid is an overgrowth of dense fibrous connective tissue that extends beyond the confines of the original wound in contrast to a hypertrophied scar(1). It develops in the skin usually as a result of trauma. Local factors, like foreign material, skin tension, and systemic factors like familial tendency, pubertal age, sex and colour of the skin are known to play a definite role in keloid formation(1-3). We report a child who developed a large keloid following venipuncture.

A twelve-year-old girl was admitted with fever and altered sensorium of 4 hours duration and showed signs of meningeal irritation. She was diagnosed as a case of pyogenic meningitis and was treated with intravenous ampicillin and cefotaxime, mannitol and intravenous fluids. On the ninth day, an intravenous cannula was put in a peripheral vein just below the left lateral malleolus. After a day, she developed a small ulcer at the site of cannula. The ulcer healed in 2 weeks leaving a small scar. This scar gradually increased in size to form a keloid over the next 8 months. The keloid was 15 x 17cm in size with depigmentation and hyperpigmentation in the center and margins respectively (*Fig. 1*). Parents did not consent for a biopsy from the keloid. There was no family history of keloid formation. The patient did not respond to six months of daily application of 0.05% retinoic acid and pressure application by pad and ban-

dage. The site and size of the keloid were factors against surgery. She was also advised treatment with sialistic gel sheet and intralesional corticosteroids, but the cost was prohibitive.

The common locations for keloid formation are the shoulder, presternal area, legs and upper back(1,2). In the present case the keloid developed at an unusual site following an innocuous trauma of intravenous cannulation. This, probably, has not been reported earlier(3-5). The factors known to increase the risk of keloid formation including dark skin, local skin hypoxia and skin tension below the lateral malleolus were probably contributory.

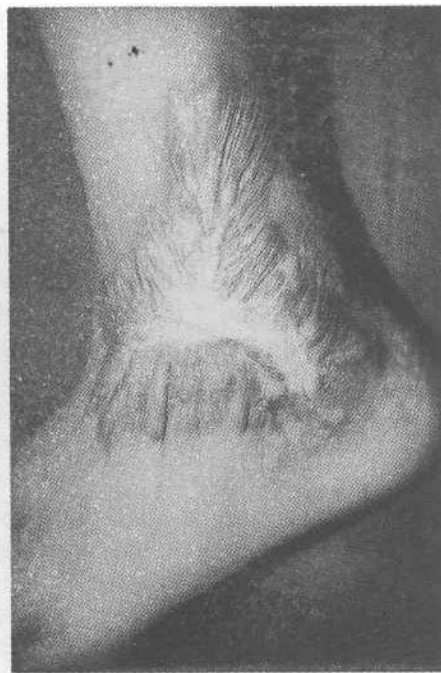


Fig.1. Keloid around the left lateral malleolus.

It was likely that the antibiotics on extravasation from the venipuncture site, bound to cellular elements and persisted as a foreign body for a long period(5). This could have led to the formation of a granulation tissue with chaotic arrangement of collagen fibres and keloid formation.

Such a large keloid in a girl was a cause of worry for the parents since it was not amenable to the available modes of therapy. Thus, extreme caution should be taken while choosing the site for intravenous cannulation. In pubertal, dark-skinned females with a positive family history of keloids, intravenous cannulation should be done at areas with least skin tension. We emphasize close monitoring of the cannulation site for signs of inflammation and position of cannula in the vein, before every injection, to prevent such occurrences. Adequate dilution of drugs, as per manufacturer's recommendations, must be ensured.

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Thermocol Box to Prevent Hypothermia During CT Scanning

The newborns are at a risk of hypothermia during ultrasound studies, echo-cardiography or CT Scanning. Recently we have used thermocol box to avoid hypothermia during CT Scanning.

Cesarean section was performed to deliver a baby with congenital

hydrocephalus at a gestational age of 35 weeks. The baby weighed 2.3 kg at birth. In view of the rapid increased in head circumference, shunt surgery was considered. On 17th day, the neurosurgeon insisted on performing a CT Scan.

The baby was sedated with triclofos. Her rectal temperature was 36.8°C, peripheries were pink and warm when kept in a thermocol box. Her head was positioned for CT Scanning by using gamgee pads and thermocol pieces. The