



## Identical unusual subtotal penile amputation in children: a report of four cases

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**SUMMARY.** 4 cases are reported in whom an accidental or iatrogenic near complete slow amputation of the penis at the corona glandis was observed at first presentation. A representative case is presented in detail with illustrations showing the surgical repair carried out. The future erectile ability of this reconstructed phallus is speculated upon.

Since 1988, four boys between 5 and 8 years of age have been seen in the outpatient clinic and later admitted to the unit with a slow subtotal amputation of the penis at the corona. In all four cases, the glans hung from the penile shaft by a thin epithelialised stalk of about 5 mm diameter, which emerged from the centre of the shaft of the penis (Figs 1, 2). The urethra within the glans distally and in the shaft proximally was normal but severed at the corona glandis. The clinical features of all 4 cases were identical and in all of them neither the parents nor the child could give any relevant history. In two cases, the parents attributed the deformity to the child tying a string or a hair around the corona glandis. There was no overt suspicion of child abuse. All the children were Moslems and there was a suspicion that the deformity could have been caused by an unethical attempt at circumcision by an unqualified person.

### Surgical technique

The deformity was treated surgically under general anaesthesia by first making a circular incision around

the two urethral openings. The urethral tubes were then mobilised both within the shaft as well as the glans to a distance of about 2-3 mm and approximated by interrupted 4-0 polyglycolic suture in one layer over a suitable stent (Fig. 3). The opposing surfaces of the shaft of the penis and the glans were then very carefully de-epithelialised except in the region of the epithelialised vascular connecting stalk (Fig. 4). About 5 mm rim of the proximal part of the glans was then de-epithelialised and penile skin was telescoped over this area by a circumferential incision and mobilisation and sutured with interrupted nylon sutures (Fig. 5). The stent was removed on the 8th post operative day, and a good result was achieved (Fig. 6).

### Results

Three out of four children have been able to pass urine normally and were followed up for one year post-operatively. The last case done a few months ago, however, developed a fistula at the junction of the prepuce and the glans which has since been successfully closed.

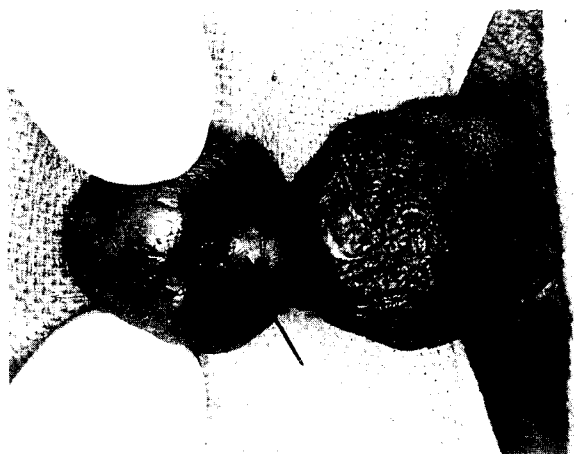


Fig. 1

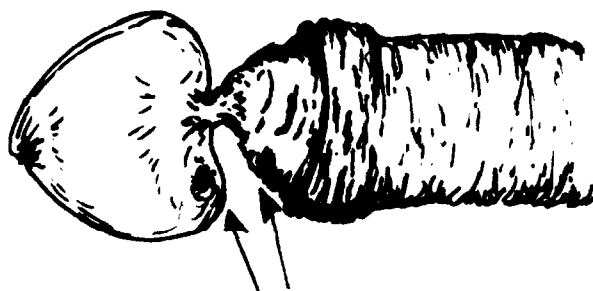


Fig. 2

**Figure 1**—Pre-operative photograph of a 5 year old child showing a connecting stalk (arrow) between glans and penile shaft after a chronic amputation. **Figure 2**—Diagrammatic representation showing severed opposing urethral ends (arrows).

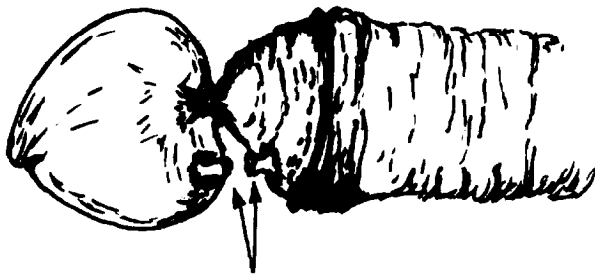


Fig. 3

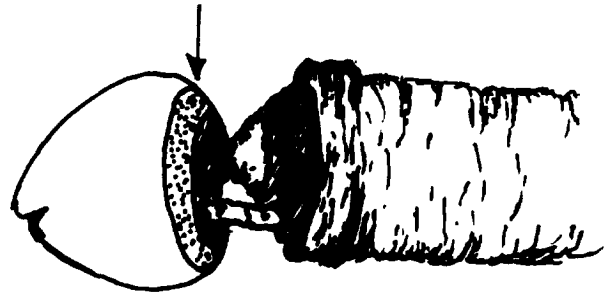


Fig. 4

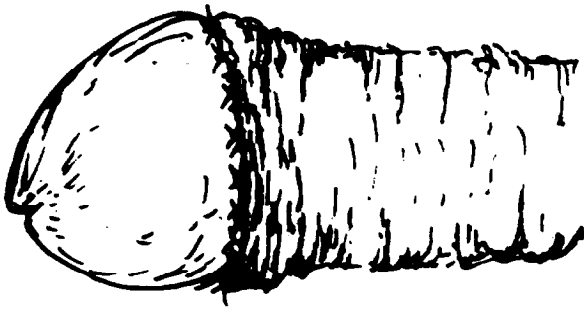


Fig. 5

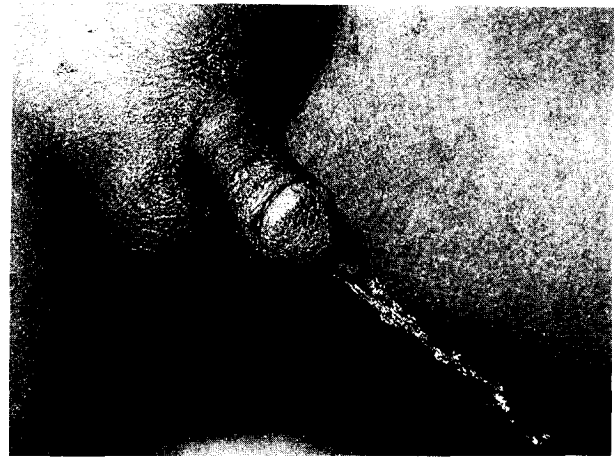


Fig. 6

**Figure 3**—Mobilisation of urethral tubes proximally and distally before approximation. Arrows show mobilised urethral tubes. **Figure 4**—De-epithelialisation of opposing surfaces of glans and penile shaft (darkened area) and approximation of urethral tubes with interrupted polyglycolic sutures. Dotted area also is de-epithelialised (arrow). The connecting stalk was not de-epithelialised. **Figure 5**—Completed surgical repair showing interrupted nylon sutures at the corona taken between de-epithelialised glans and telescoped skin of penile shaft. **Figure 6**—Early postoperative photograph showing urinary stream from normal urethral meatus.

## Discussion

A survey of the literature<sup>1-9</sup> reveals that similar cases have been reported before, where the amputating agent was hair, and the children had undergone circumcision prior to the strangulating episode. There is also mention that the child may have been mentally retarded or not in an ideal familial or social environment. The present series does not conform to any of these features. The parents of all four children denied an earlier circumcision, the children were from stable homes and normal in their behaviour and no hairs were discovered at the site of amputation. However, the possibility that a quack might be using a string-like object to effect a circumcision cannot be ruled out. In fact, such a possibility can be speculated upon as regards the cases reported by Bashir and El-Barbary<sup>1</sup> from Jordan and Egypt respectively.

It is difficult to speculate if erectile function of these reconstructed penises will be normal. Most of the cavernosal connection between the penile shaft and the glans had been interrupted in the original pathology and it is unlikely that the new attachment of the glans to the shaft through a de-epithelialised surface will be able to bring forth enough blood into the glans to effect tumescence simultaneously with engorgement of the penile shaft for penetration during the sexual

act. The parents have been made aware of such a consequence and requested to follow up in our outpatient clinic. A possibility exists that bridge grafts of veins might need to be performed to connect the two cavernosal units.

## Acknowledgement

We would like to thank Mr Parshuram Pangerkar for the photographs.

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Paper received 9 December 1992.

Accepted 5 March 1993, after revision.