Protection of trunnion during revision total hip arthroplasty

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BACKGROUND

Revision total hip arthroplasty has been on rise over the past decade. Some revision total hip arthroplasties require revision of the acetabular component only.[1] In such cases, there is a possibility of damage to the trunnion of the retained femoral component. We have devised a novel technique of using the urine drainage port of the Foley's catheter to protect the trunnion against intraoperative scratching, contamination and damage.

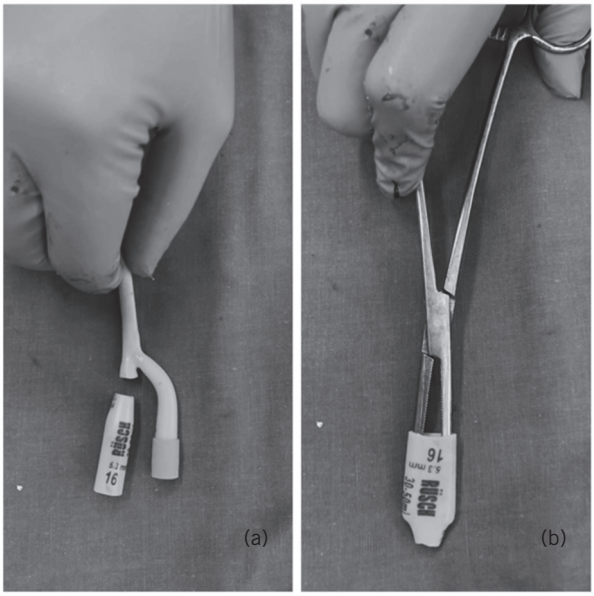

Figure 1 (A) Urine drainage port of Foley's catheter number 16; (B) Long artery forceps to widen the drainage port.

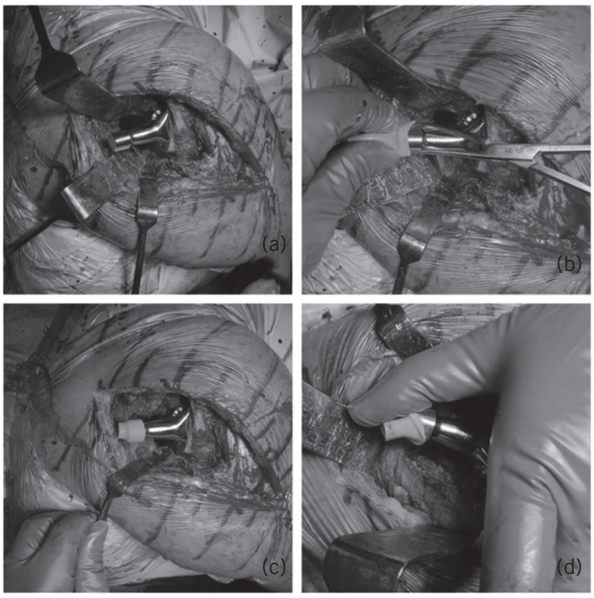

Figure 2 (A) Intraoperative image of the trunnion of a stable femoral component; (B) Long artery forceps used for sliding the urine drainage port over the trunnion; (C) Drainage port securing the trunnion; (D) urine drainage port easily rolled off.

TECHNIQUE

Once the joint is exposed and dislocated, the femoral prosthetic head is removed. The urine drainage port of a Foley's catheter no. 16 size is slid over the trunnion with the help of a long artery forceps (figs 1 and 2A,B), the remaining free portion of the Foley's is cut off (fig 2C). Further retraction is done over the sleeve to spare the trunnion from damage. Once the acetabular cup has been revised, that part of Foley's is easily rolled of and discarded (fig 2D).

DISCUSSION

Damage of the trunnion can lead to accelerated wear and early failure of the retained hip. David *et al* have described a technique wherein they used barrel of the syringe to protect the trunnion.[2] This barrel can move and the inelastic hard consistency can damage the trunnion. There is no other recommended technique in the literature. Our technique is simple, safe and effective. As the Foley's sleeve is made of silicone elastomer, it conforms to the shape of trunnion and securely grips it. This prevents dislodgement of the sleeve. It occupies less space, thus making exposure easier.

References

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