Difficult urethral catheterisation made safer: visualising the 'blind' hydrophilic wire

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Mandibular sagittal split osteotomy – A modified technique to reduce postoperative labiomental paraesthesia

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BACKGROUND

Difficult urethral catheterisation in a male, non-trauma patient with urinary retention is often due to a false passage, urethral stricture or bladder neck contracture. When simple measures¹ have failed, the usual choice is between use of a suprapubic catheter and cystoscopic catheterisation over a guidewire. However, suprapubic catheterisation has its contraindications and the wait for theatre can be long. An alternative strategy is the blind passage of the hydrophilic wire into the bladder in the emergency department,^{2–5} which is not without risk as the guidewire can end up in the false passage, ejaculatory duct or ureter. We advocate ultrasonography visualisation of the "blind" wire, which makes this approach safer.

TECHNIQUE

Following the instillation of lubricating gel, a Sensor™ (Boston Scientific, Marlborough, MA, US) wire is passed in the urethra, its advance monitored using ultrasonography (abdominal transducer pointing over the bladder). Once the sufficient length of the wire is in the bladder, the operator can either pass an open tip 16–18Fr Foley catheter over the wire (if false passage is suspected) or perform dilation with S-Curve™ (Cook Medical, Bloomington, IN, US) urethral dilators (in the case of urethral stricture or bladder neck contracture) prior to catheterisation. If dilation is not tolerated, a temporary 6Fr ureteric catheter or 5/8Fr infant feeding tube can be passed instead.

DISCUSSION

The ultrasonography machine is now an indispensable part of the equipment of many emergency departments. The echogenicity of the guidewires makes it easy to ultrasonically visualise their passage into the full bladder. In our hands, this technique proved to be safe and effective.

References

1. Tadtayev S, Mazaris E. Difficult urethral catheterisation made easy: validation and the new application of the established technique. *Ann R Coll Surg Engl* 2013; **95**: 300.
2. Abbott JE, Heinemann A, Badalament R, Davalos JG. A clever technique for placement of a urinary catheter over a wire. *Urol Ann* 2015; **7**: 367–370.
3. Olson L, Esler R, Gunendran T. Blind hydrophilic guidewire for difficult urethral catheterisation. *Ann R Coll Surg Engl* 2014; **96**: 629.
4. Blitz BF. A simple method using hydrophilic guide wires for the difficult urethral catheterization. *Urology* 1995; **46**: 99–100.
5. Zammit PA, German K. The difficult urethral catheterization: use of a hydrophilic guidewire. *BJU Int* 2004; **93**: 883–884.

Sagittal split mandibular ramus osteotomy is one of the most frequently employed surgical procedures in orthognathic surgery, and is used to advance, set-back and rotate the distal (tooth-bearing) segment of the mandible. The original technique, described by Trauner and Obwegeser,¹ has seen a number of modifications.^{2,3}

The principal complication associated with the technique and its described modifications remains temporary or permanent neurosensory deficit of the lower lip and chin. Reports in the literature on the frequency of this complication vary quite significantly, but reach up to 85%.⁴

TECHNIQUE

The suggested modification in technique is that the vertical osteotomy along the anterior border of the mandibular ramus is made lateral to

Figure 1 Oblique view of the right mandibular ramus, demonstrating the more lateral position of the modified sagittal split osteotomy (solid line) in relation to the traditional position (dotted line)