TRANSANAL IRRIGATION USING A CONE SYSTEM IN PREGNANT PATIENTS WITH SPINA BIFIDA

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Introduction:

Constipation is the commonest bowel symptom in pregnancy, affecting about 40% of pregnancies[1] and being especially common in the first two trimesters[2]. It is especially common if the mother-to-be was constipated prior to pregnancy.[1]

Bowel management for individuals with spina bifida (SB) can be challenging with over 50% experiencing regular constipation and faecal incontinence, termed neurogenic bowel dysfunction (NBD). When SB individuals become pregnant, bowel management can become less effective.

Transanal irrigation (TAI) is an effective and evidence-based way of managing NBD. Current guidance suggests that TAI is relatively contraindicated in pregnancy. The Qufora® IrriSedo Cone System (Figure 1) comprises a tube connecting a suspended water bag via a simple valve to a hydrophylic-coated cone. Compared to a catheter based system it may provide a safer yet effective way of undertaking TAI in pregnant SB individuals.

We studied our cohort of SB patients to assess whether such a cone system was safe to use in pregnancy.

Figure 1: The Qufora® IrriSedo Cone System

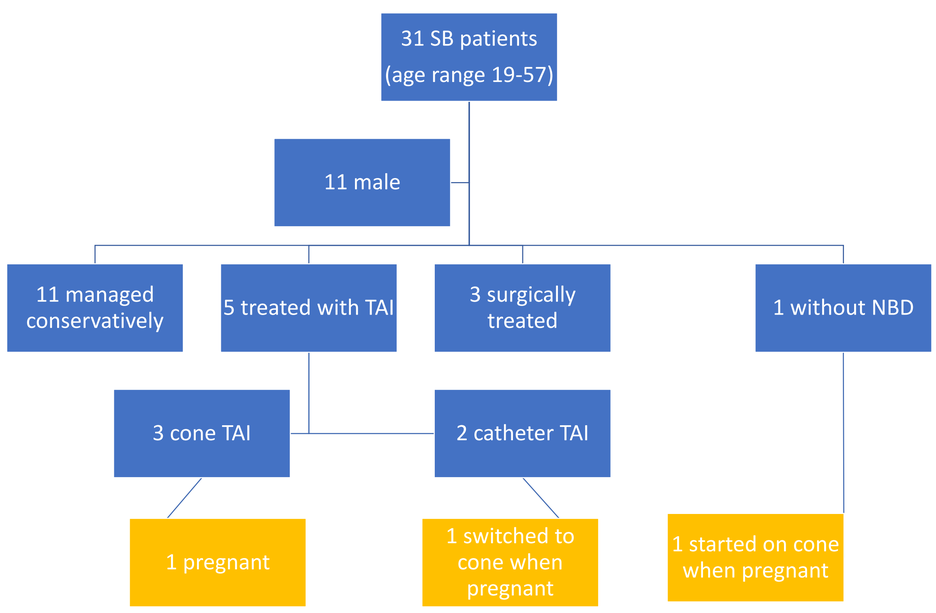


Figure 2: Patient cohort

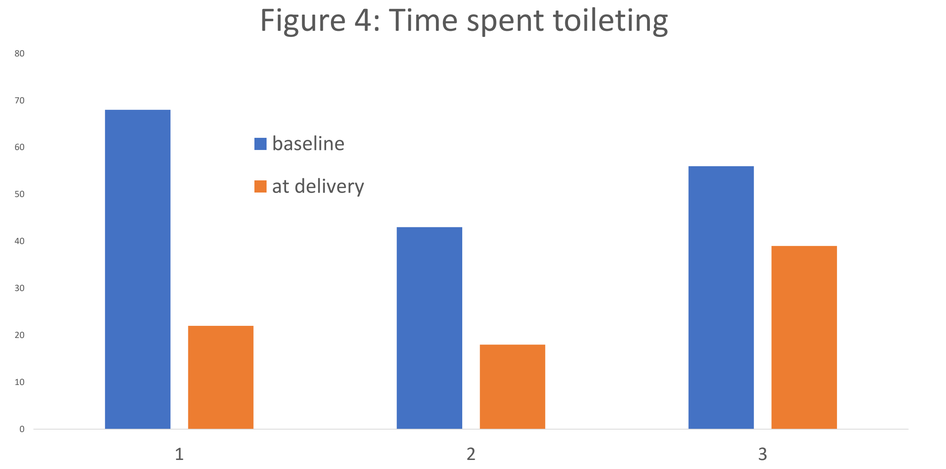
Methods:

Currently, 7 (5 female) of 31 (20 female) SB patients with NBD use TAI in our practice, five with a cone and two with a catheter. We report on three SB individuals, two of these patients with pre-pregnancy bowel dysfunction (neither on TAI) and one who had no bowel symptoms prior to pregnancy. All three individuals were commenced on the Qufora® IrriSedo Cone System during pregnancy.

Outcome was assessed using the neurogenic bowel dysfunction score (NBDS).[3]

Figure 3: NBD scores in individual subjects

Figure 4: Time spent toileting



Results:

Two women developed worsening constipation and faecal incontinence in the first trimester and the woman who was asymptomatic before pregnancy developed constipation at week 20 (Figure 2). All failed to respond to adjustment of lifestyle, laxatives, suppositories or loperamide.

Two women had to stop working prematurely due to their bowel symptoms. All three were trained and started on cone irrigation at weeks 11, 24 and 13 respectively.

As per unit protocol, patients started irrigation on alternate days with no laxatives initially. In two patients docusate 200mg per day was started due to incomplete response.

No complications of TAI occurred. NBD scores fell in all 3 at delivery (Figure 3) from moderate to mild levels and mean time spent toileting also fell.

All three delivered between 38 and 39 weeks gestation to healthy babies. Post-partum two patients reverted to use of docusate and suppositories alone and one continued to use cone TAI.

Conclusions:

TAI with the Qufora cone is an option for spina bifida individuals who develop bowel symptoms refractory to conservative measures during pregnancy.

NBD scores and time spent toileting fell in all three individuals.

References:
1. van Brummen et al: Int Urogynecol J Pelvic Floor Dysfunct 2006;17:224–230.
2. Zielinski et al: J Perinat Neonatal Nurs 2015;29(1):23-31
3. Krogh et al: Spinal Cord 2006;44:625-631