BLADDER NECK ARTIFICIAL URINARY SPHINCTER (BN AUS) FOR RECURRENT OR COMPLEX PRIMARY, URODYNAMICALLY PROVEN STRESS AND MIXED URINARY INCONTINENCE - OUTCOMES FROM A TERTIARY REFERRAL CENTRE

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### Aim

To assess the outcome of BN AUS insertion for recurrent or complex primary urodynamically proven stress urinary incontinence (SUI) and stresspredominant mixed urinary incontinence (MUI)

### Materials and method

- Prospective database kept from 2006 2016 from a single centre (2 surgeons) of women having BN AUS for SUI and MUI
- Data collected re type and aetiology of incontinence, previous surgery, type of procedure and outcomes in terms of cure and complications

## Results

50 women aged 50.5 years (range 27-69). Results and complications outlined in table below

	Single Stage Procedure	Staged Procedure	Cuff alone	Total
N	25	21	4	50
Component Repositioning	1	3	0	4 (8%)
Mechanical Malfunction	0	2	0	2 (4%)
Device Infection	1	1	1	3 (6%)
Device Erosion	6	2	0	8 (16%)
Device Explantation	7	3	1	11 (22%)
New onset detrusor overactivity	0	1	0	1 (2%)
CISC	8	6	1	15/39 (38%)*
Dry with AUS	16	14	3	33/39 (85%)*
Improved with AUS	2	2	0	4/39 (10%)*
Wet with AUS	0	2	0	2/39 (5%)*
*39 patients remaining after the 11 explants				

#### Results

There were 34 primary implants, 12 device replacements following mechanical failure and 4 new implants following explantation of an earlier device for erosion

Aetiology of incontinence:

- Neurological (N = 17)
- Recurrent SUI (N = 16)
- Epispadias (N = 6)
- Pelvic fracture urethral injury (N = 4)
- Bilateral single ectopic ureter (N = 3)
- Urethrovaginal fistual (N = 1)
- Augmentation urethroplasty (N = 1)
- Congenital Mullerian anomaly (N = 1)
- Undiversion (N = 1)

# Conclusion

- BN AUS has a 6% acute infection/erosion rate and a 16% chronic infection/erosion rate requiring explantation
- For the 78% of women with functioning devices, incontinence is cured in 85% and improved in a further 10%