

## CLINICAL ASSESSMENT OF COMPLICATIONS OF SURGICAL TREATMENT FOLLOWING RADICAL PROSTATECTOMY: EXPERIENCE AFTER 202 CASES

### Hypothesis / aims of study

Stress urinary incontinence usually affects patients' quality of life and requires to be treated by surgery whenever a conservative therapy is not effective

### Study design, materials and methods

We conducted a retrospective analysis of a prospectively collected database. From June 2006 to June 2011 187 patients with post prostatectomy urinary incontinence (PPUI) underwent surgery at our Department. In case of mild-moderate incontinence without radiation therapy 72 patients (39.2%) underwent Pro Act<sup>®</sup> (Uromedica, USA). In case of moderate-severe incontinence with or without radiation therapy 47 patients (25.5%) underwent periurethral constrictor (PU) and 46 (25.2%) bulb-urethral sling Argus<sup>®</sup> (Silimed, Brazil and Promedon, Argentina respectively). In case of failure of precedent surgery or severe incontinence in young selected patients (19 cases) we used artificial sphincter AMS 800<sup>®</sup> (American Medical System, USA). Overall 202 procedures were performed and for each patient surgical complications were recorded according to Clavien-Dindo classification

### Results

Overall, a single procedure was carried out in 167 patients (90.7%), while 16 (8.7%) and one single case respectively a second or a third procedure was required. Overall we observed 83 surgical complications (45.1%), as shown in Tab 1. A grade I-II complications was observed in 42 cases (50.6%) while a grade III complications was registered in the other half (41/83, 49.4%). In 15 patients with Pro Act device a surgery was required because of failure (migration and balloon deflating). In twenty patient who underwent PU positioning the indication for re-surgery was a complete urethral erosion (12 cases) and the replacement of subcutaneous control port. Four cases of sling Argus had to be removed: one urethral erosion, one accidental rupture and two cases of collapse of fixing rings through the muscular fascia. In two patients underwent AMS 800 placement we recorded sudden leakage due to reservoir deflating.

Tab. 1

Complications	Clavien Dindo	Pro Act	P. C.	Argus	AMS 800
Bladder injury	I-II	21	2	2	0
Infections	I-II	0	2	1	0
Urinary retention	I-II	0	0	14	0
Re-surgery	III	15	20	4	2
Overall	Complications	36/72 (50%)	24/47 (51%)	21/46 (45.6%)	2/19 (10.5%)

### Interpretation of results

Pro Act implant was related to a risk of low grade complications and whenever surgery was required, the procedure was performed using only local anaesthesia. On the other hands, the implant of PU was related to a higher risk of major complications: urethral erosion was found in twelve patients (12/47, 25.5%) at the follow up to 36 months. The way of working of bulb-urethral sling Argus causes transitory urinary retention (14/46). Furthermore, remarkable perineal pain needs analgesic drugs until four weeks. Our surgical complications in the management of artificial urinary sphincter are quite similar to the literature: actually it's still considered the gold standard of care for PPUI, however, regarding to the low regional reimbursement for this device, we had to consider the very low cost effective surgery for Italian Health Care and for this reason is not a first choice device.

### Concluding message

The surgical management of PPUI is safe and efficacy and it's mainly related to low grade complications. All the improvements of surgical devices and learning curve with the mentoring are required in order to reduce the risk of a second surgery

### Disclosures

**Funding:** None **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** It was a retrospective study about currently surgery for male incontinence with approved devices (CE trade mark) **Helsinki:** Yes **Informed Consent:** Yes