

# Abstracts – Podium Presentations

## 32nd National Conference on Incontinence (NCOI) 22-25 May 2024 Brisbane Convention & Exhibition Centre, Brisbane QLD

### Characteristics of Participants 3-Months After Pelvic Fracture: Midpoint of an Intervention Trial

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**DOI** <https://doi.org/10.33235/anzcj.30.2.20>

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**Introduction:** Fracture to any part of the pelvis can impact pelvic floor function. Our prior small pilot observational study revealed that women can have significant enduring symptoms of bladder, bowel and sexual impairment at least one-year post injury and that men also suffer changes in urogenital function.<sup>1</sup> This abstract presents interim findings of the observational component to a large implementation study screening for pelvic floor dysfunction (PFD) in pelvic trauma patients at 6 and 12 months with nested randomisation to physiotherapy care when PFD is identified.

**Objectives:** To determine the prevalence and severity of pelvic floor dysfunction 3-months post pelvic fracture.

**Methods:** Acute adult inpatients post pelvic fracture were recruited from two tertiary trauma hospitals. Standardised metrics of urogenital function were completed at baseline (recall based on 4 weeks prior to injury) and repeated again 3-months post injury. The instruments used were the Australian Pelvic Floor Questionnaire (APFQ)<sup>2</sup> and simplified International Index of Erectile Function (IIEF-5, males only).<sup>3</sup> Measures were completed electronically using a secure web application (REDCap). De-identified data was imported to SPSS software Version 28 for descriptive analysis. PFD was defined as an increase from baseline in any APFQ domain score of 1 or an IIEF-5 total score of 21 or less.

**Table 1. The top 5 items in the APQF and IIEF-5 with the largest change signifying worsening in pelvic floor function from baseline to 3-month assessments stratified by sex.**

Male		Female	
Question	Domain	Question	Domain
1. When you attempted sexual intercourse, how often was it satisfactory for you?	Sexual function	1. Do you use laxatives to empty your bowels?	Bowel
2. Do you use laxatives to empty your bowels?	Bowel	2. How much does your bladder problem bother you?	Bladder
3. How much does your bladder problem bother you?	Bladder	3. Do you have a feeling of incomplete bladder emptying?	Bladder
4. How many times do you get up at night to pass urine?	Bladder	4. Do you leak with coughing, sneezing, laughing or exercising?	Bladder
5. Do you need to rush/hurry to pass urine when you get the urge?	Bladder	5. Do you wet the bed before you wake up at night?	Bladder

**Results:** A total of 546 patients have been screened up to November 2023; isolated acetabular injury excluded 23.5% of potential participants. Two hundred and thirty-seven participants have been recruited, with significantly more males (n=150) than females (n=87). A total of 65% of participants were identified as having PFD at 3 months; 62% in males and 71% in females. Table 1 describes the top five questionnaire items on which score were worse at 3-month follow up compared to pre-injury. A requirement for aperients and bladder-related bother was prioritised by both sexes.

**Conclusion:** Three months after traumatic insult to the pelvic girdle, nearly 2/3 of patients were found to have a PFD. These participants have subsequently been randomised into the nested controlled trial to determine the uptake of referral to specialised continence or urology services. Reassessment at 12 months will identify both the natural history of PFD with usual orthopaedic care, and uptake and patient status after referral for pelvic physiotherapy.

### Project Funding

Value-based Healthcare Innovation Grant Program, Transport Accident Commission.

Ethics Approval Number: 2021.034, RMH66244.

### References

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