

Cystic fibrosis and pelvic floor dysfunction: a pilot study - Part B

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Background

- Pelvic floor muscle training (PFMT) is effective in the treatment of urinary incontinence, faecal incontinence and constipation in the general population.
- Pelvic floor dysfunction (PFD) is more prevalent in the cystic fibrosis (CF) population:
 - **39% of females and 12-15% of males** report **bladder dysfunction**;
 - **54% of females and 44% of males** report **bowel dysfunction**.
- Pelvic floor dysfunction prevent patients with CF from doing effective airway clearance due to fear of being incontinent.



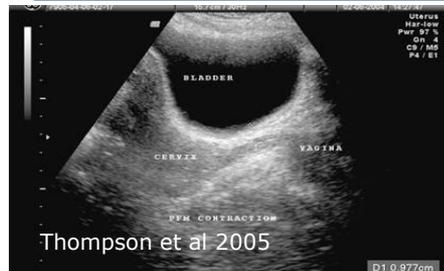
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Current practice

- There is variability in the reporting of PFD and minimal information on treatment of PFD in the CF population (Chambers et al 2017; Button et al 2019)
- Currently patients are only referred for treatment of PFD if they report it as a problem which they are embarrassed to do.
- Real time ultrasound is an effective tool to teach pelvic floor exercises correctly and can be utilised by all physiotherapists (Sherburn et al 2005)

Intervention

- Nine Participants with CF who reported bothersome bladder and bowel symptoms on the Australian pelvic floor questionnaire (APFQ) were recruited to take part in 6 months of PFMT that was taught via suprapubic ultrasound imaging to ensure correct activation.
- Real-time ultrasound was used to ensure correct activation of the pelvic floor muscles.
- Patients were given an individualised home programme
- They were followed up by a 2 monthly phone call over the 4 months and repeated the APFQ to see effect of the training on their symptoms



Outcomes

- There was no statistically significant improvement post intervention for either the Bladder ($p=0.672$) or Bowel ($p=0.096$),
- BUT clinically important finding
 - **7 of the 9 participants** reported **improved bowel function**

Conclusion

Individualised PFMT in combination with use of ultrasound:

- Clinically improved symptoms of PFD in the CF population
- Reduced impact of PFD on QOL

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