

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.



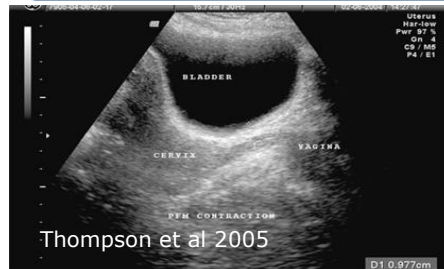
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Intervention

- 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

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)



Conclusion

Individualised PFMT in combination with use of ultrasound:

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

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**

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