

## APPENDICOSTOMY ANTEGRADE COLONIC IRRIGATION BY ELECTROMECHANICAL PUMP (RAPID COLON IRRIGATION SET): A NOVEL METHOD AS FECAL INCONTINENCE MANAGEMENT

### Hypothesis / aims of study

antegrade colonic irrigation enema(ACIE)is established as an old treatment for child fecal incontinence and recently is approved as a treatment for different causes of adult fecal incontinence(cancer surgery, neurogenic bowel,spinal cord injury, sphincter trauma, etc.). Despite of benefits of emptyingthe colorectum and prevent fecal incontinence or constipation, this method is time consuming and requires thorough instruction and training.

The purpose of this study was to innovate and assess novel technique to decrease time consuming and improve Performance of irrigation.

### Study design, materials and methods

We designed an electromechanical pumpfor colon irrigation and assessed by a randomized crossover clinical trial study, involving two four weeks treatment phases. 30 patients were included that suffered fecal incontinence and had been managed with appendicostomy antegarde colon irrigation.

### Results

Traditional mean toileting time was 67minutes, versus pump-toileting time that was 24.6 minutes(PV: 0.00). The volume of water was reduced in 13 patients. Mean of volume was 1712 ml in traditional method and 1164 ml in pump method (PV: 0.279). Mean Cleveland Clinic Florida Fecal Incontinence score (CCF\_FIS) for pump was 5.84 compare 6.24 for traditional method (PV: 0.000).

### Interpretation of results

The results showed that the pump decrease time and volume of irrigation compared with traditional method. All patients had a reduction in toileting times.

### Concluding message

Our study provides evidence for the first time that our novel method can facilitate and speed-up colon irrigation without any adverse effect on the outcome.

### Disclosures

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**Subjects:** HUMAN **Ethics Committee:** ethical committees, Iran university of medical sciences **Helsinki:** Yes **Informed Consent:** Yes