Tension-free vaginal tape – a 15 year review of effect on urinary incontinence in patients with CF

Kendall V[1], Langman H[1], Oldfield M[2], Webb K[1] and Jones A[1]

Manchester Adult Cystic Fibrosis Centre[1], St Mary's Rehabilitation Unit[2],

Introduction

In a cystic fibrosis (CF) population with increased risk factors for stress urinary incontinence (SUI) such as chronic cough and constipation, a tension-free vaginal tape (TVT) may be considered for patients who have undergone urological investigation and pelvic health physiotherapy, but for whom it has provided inadequate improvement.

Aims

The aim of this study was to retrospectively evaluate longer-term outcomes of females with CF who have undergone a TVT for SUI over the previous 15 years.

Methods

Physiotherapy notes of 6 female patients at our adult CF centre who had undergone a TVT were examined for:

- Age
- FEV1%
- BMI
- Obstetric history pre/post TVT
- Modulator therapy
- SUI pre/post TVT
- Level of success

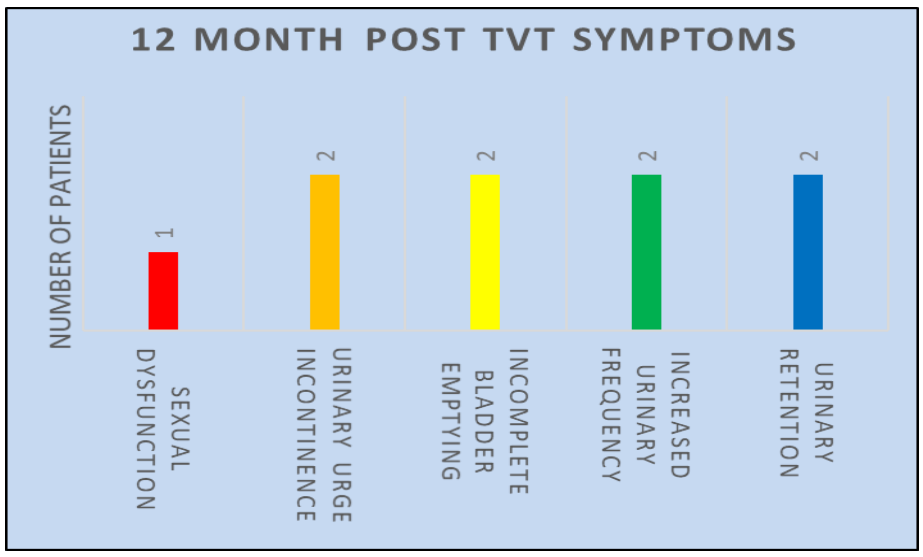
Results

	Median	Range
Age (years)	29.3	23-42
FEV1%	51	38-69
BMI	20.1	18-23.4

- Obstetric history pre-TVT: n=3, total of 5 births
- Obstetric history post-TVT: n=2, total of 3 births
- 6/6 saw initial improvement in SUI by 12 months
- 1/6 reported no urinary symptoms by 8 years post TVT.

However other symptoms reported included:

Results



Discussion

All patients commenced modulator therapy since TVT which likely reduced cough and therefore risk of SUI related to cough. Increased BMI and improved fertility with increased chance of pregnancy associated with CFTR modulator therapy provide further risk factors for SUI. As more women with CF survive to reach menopause and older age, these additional risk factors for urinary incontinence may require therapy and potentially surgical input.

Conclusion

In this small review, a TVT provides a potential treatment option to a problem that can cause physical and psychological adverse outcomes. This reflects a previous shorter term study[2]. Guidance has been to avoid pregnancy post TVT, however 2/6 patients underwent pregnancy post TVT.

References

1 National Institute for Health and Care Excellence (NICE, 2019) *Urinary incontinence and pelvic organ prolapse in women: management*.NG123. Available at https://www.nice.org.uk/guidance/ng123 (Accessed 6 January 2022).

2 Helm, J.M., Langman, H., Dodd, M.E., Ahluwalia, A. (2008) A novel solution for severe urinary incontinence in women with cystic fibrosis. Journal of cystic fibrosis: official journal of the European Cystic Fibrosis Society 7(6): 501-4