Ospidéal Ollscoile Phort Láirge
University Hospital Waterford
Regional Cancer Centre South East

Department of Urology

A Collaborative Approach to Urological Care: Establishing a Urodynamics Multidisciplinary Team (MDT) Meeting

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BACKGROUND

Urological Specialty in UHW

- Formal Urodynamic (UDS) investigations a requirement for informed treatment decision making

Nurse Specialists

- Lone worker, nurse specialists in Urology & Gynaecology to perform formal UDS investigations
- Necessity to acquire new knowledge, skills and achieve competencies

The Lower Urinary Tract

- Lower urinary tract (LUT) consists of the bladder and urethra
- Function: Allows for low-pressure storage of urine with conscious control of micturition
- Sufferers of lower urinary tract dysfunction experience a significant burden on QOL

What is Urodynamics?

- Measurement of relevant physiological parameters of the LUT to assess its function and dysfunction
- A standard urodynamic test involves **non-invasive** evaluation of bladder emptying, and **invasive** assessments of bladder storage function and bladder emptying function**.**

• (Lenherr & Clemens, 2013)

Urodynamic Investigation Protocol:

1. Urological History
2. LUTS Assessment
3. Validated Symptom Score (including QOL indicator)
4. 3-Day Bladder Diary (FVC)
5. Review of PMH & Medications
6. Physical Exam
7. Urinalysis
8. Uroflowmetry
9. Pressure flow study

• International Continence Society (ICS) Guidelines

QUALITY IMPROVEMENT INITIATIVE

Establishment of Urodynamics MDT monthly Meeting

(Both Educational & Formulate Plan of Care)

Joint Specialist Meeting:

Urology
Gynaecology
Urology nursing colleagues - UPMC Whitfield

Attendees:

Consultants, ANPs, CNSs, NCHDs, Physiotherapists, Nurses, Students

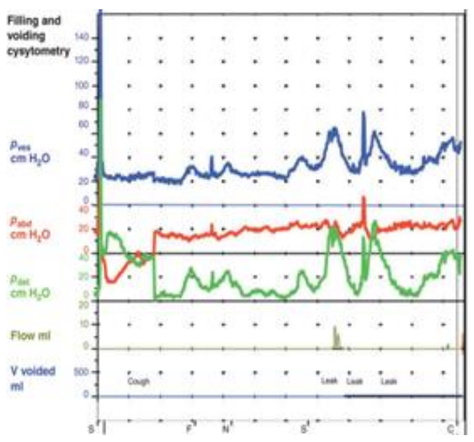
Purpose of Meeting:

Education
Knowledge Sharing
Coordinated and efficient approach to diagnosis and management of patients with LUTS

(Abrams et al, 2018)

Agenda & Responsibilities:

ANP/ CNS presents patients UDS Investigation Protocol (as above)
NCHD outlines and interprets UDS trace in preparation for formal exams
Consultant Urologists question & provide education on quality UDS studies and interpreting traces
Findings discussed by all
Plan of care formulated by Consultants
UDS MDT documentation completed
Consultant OPD patient follow up



MED SURGICAL part of uniphar medtech

Software Instillation to facilitate presentation of live traces at Urodynamics MDT in UHW

M.E.D Surgical supplied and configured an offline version of the Laborie Urodynamics Software on a standalone PC/Laptop to allow the user to import and review a Urodynamics Study from their Nexam Urodynamics system on the standalone PC/Laptop.

1. From the Nexam Measuring system, the User creates an Archived Version of the Patient folder, or a specific exam only, as an FCU file type.
   Optional, within the Archive function, the user may anonymise the exams to remove patient identification data if required.
2. The User copies the output FCU File from the Nexam to the Offline PC with the Laborie Review software installed, and then imports the FCU file to the Offline Program.
   The Offline programme will create a patient directory and exam list from the FCU Files
3. Once imported to the Offline Software, the Urodynamics study may be reviewed the same as if it were on the Original Nexam system, with all the same functionality to scroll, zoom, read values etc.
4. In this way a Urodynamics study may be reviewed in detail away from the Nexam System for a clinical meeting or similar with the same facilities as if reviewing on the Nexam.

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METHODOLOGY

Completed Certificate in Urodynamics in Bristol Urological Institute

Attended National Annual UDS Meetings

Attended established Urology Urodynamic MDT in Mater Hospital Dublin

Liaised with Gynaecology and UPMC Whitfield Urology colleagues to gain involvement

Formulated UHW Urodynamic MDT Meeting SOP – Approved by Consultants

Liaised with IT Dept UHW & MED Surgical to install software to facilitate discussion of live UDS traces at MDT

Liaise with Pharmaceutical/Equipment Company Reps to provide education session prior to each UDS MDT

RESULTS

- Coordinated efficient approach & use of resources
- Shared decision making
- Increased access to specialist knowledge
- Improved communication and collaboration
- Successful, well attended MDT

EFFECT OF INITIATIVE

- Improved patient outcomes through MDT discussion
- Professional Development: enhanced skills and knowledge undertaking & interpreting Urodynamic investigations
- Adherence to evidence-based practice guidelines

SUSTAINABILITY

- Well Established
- Strong Leadership
- Ongoing Training & Education
- Patient Centred Approach
- Successful Collaboration
- Standardisation of UDS MDT
- Use of Specialist Technology

References:
Lenherr, S.M & Clemens, J.Q (2013) "Urodynamics: with a focus on appropriate indications", *Urol Clin North Am.* Nov;40(4):545-57.
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