BEING ANNOYED BY POST-MICTURITION DRIBBLING
POST-MICTURITION DRIBBLING, WHAT DO WE KNOW?

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A CONSULTANT FOR NIDDK/NIH. RECEIVED HONORARIA
The prevalence of PMD in literature taken cautiously!

Some reports PMD as “incomplete emptying” e.g. 11.8% of men and 8.5% of women reporting a feeling of *incomplete emptying* (considered *synonymous* to post-micturition dribble; in 3200 men and 2300 women with LUTS).

*Maserejian et al, BJU Int. 108, 1452-1458, 2011*
In a Japanese study*, a mail questionnaire in 2839 males from 20 to 50, the prevalence of PMD was 11.5, 13.2, 19.4 and 26.9% in the 3rd, 4th , 5th and 6th decade respectively.

PREVALENCE:

- Tanaka et al considered PMD as a type of post-prostatectomy incontinence that they found in 48 patients (62%) of 78 who responded positively to a survey on the issue.

A study from Sweden* using mailed questionnaires, involved 2217 men in a rural community.

The prevalence of PMD was 21% overall, 20% among men of the age 40-49 years

PMD is a form of Ul!!! (Really)
It is bothering for the patient and sometimes is the leading cause he seeks medical care (as in our experience)
PMD is thought to result from failure of Bulbocavernosus (Bulbospongiosus) muscles to evacuate the bulbar urethra, causing pooling of urine in the bulbar portion, which later dribbles\(^1,2\)

As early as 1977, Stephenson and Farrar studied 15 males with PMD as their chief complaint; using the now described as video-UD. 7 did not had any abnormality while 8 had different inconsistent patterns of abnormalities.

PATHOPHYSIOLOGY:

This was probably the first study* to prove; that PMD results from pooling of urine in the bulbar urethra, which later on escapes on sitting or standing

PATHOPHYSIOLOGY:

- 8 years later, Paquin and associates published in the same journal a study on 15 men also!
- But they used electromyography of bulbospongiosus muscles (using 2 electrodes on the penis and needle electrode in the BS muscle)
- They recorded reflex latency of the BS with penile stimulation, as well as activity during and after micturition.
They found that reflex latency (with penile electric simulation) was normal. Then patients were asked to micturate while the needle electrode is in.

Motor activity of the muscle at the end of micturition was normal in all men.
They postulated that urine trapping occurs above the external urinary sphincter (in the posterior urethra and not in the bulbar part).

PATHOPHYSIOLOGY:

- However, still the most acceptable theory for PMD is the failure of BS muscles to evacuate the bulb of the urethra

PATHOPHYSIOLOGY:
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OTHER CAUSES?

- Vast majority of young men with PMD (with BS muscle dysfunction) could be called “primary”

- This intuitively brings into focus “secondary” PMD....
Phimosis: could be a cause for PMD. In this case, circumcision is the treatment.
Urethral stricture, especially in the bulbar or prostatic segments can present with PMD
Urethral diverticulum is another cause. 8 of 22 patients (36%)* included in a study on acquired urethral diverticula in men complained of dribbling.

Prostatic utricular cyst is a rare cause. Few case reports discussed it and the presentation is usually PMD.
During the period of November and December 2013, we screened males attending our OPD. Those with PMD as major complaint were included if:

1. Age: 18-45 years
2. Willing to provide an I-PSS (Arabic version)
3. Unremarkable clinical examination
4. Q max in free flow is > 15 ml/s
5. PVR: < 50 ml
6. Urinalysis is free on microscopic examination (WBCs< 5/ HPF)
13 men out of 383 men attending OPD in the same period were eligible.
A prevalence of 3.4% in men attending OPD in a tertiary center.
TREATMENT OF PMD

- Most widely applied practice is: self-milking of the bulbar urethra (milking of the perineum) and is usually self-practiced by the patient; even before seeking help
- Pelvic floor muscle training/muscle exercise

- Both techniques are effective, but PFMT is more*

TREATMENT OF PMD

- Reports on the treatment of PMD solely are scarce; rather it is the treatment of PPI that is quoted in literature.
- Studies have demonstrated the feasibility of teaching the patient how to contract the Bulbospongiosus/ ischiovcaavernosus muscles.

One of the following techniques could be used:

1. Contraction of the anal sphincter muscle with relaxation of the abdominal wall muscles.
2. Contraction of the BS muscles i.e. tightening of the perineum. This helps restoring the function of this muscle
The patient might assume Crook lying position which enables the patient to visualize the “penile dip” or the “scrotal lift”
This is the surest sign that the patient is actually contracting the proper muscle
Crook lying position; facilitates the exercise and enables the patient seeing the “penile dip”
Treatment continues for at least 5 weeks. This is no different from the 6-week minimum duration for the PFMT practiced for female SUI.
Suggested reading?

PMD is a true dysfunction, affecting between 3 and 12% of young men

- It’s caused by BS muscle dysfunction (primary)
- Muscle exercise is the only effective therapy
“Men at some time are masters of their fates: The fault, dear Brutus, is not in our stars, but in ourselves”

(Julius Caesar, William Shakespeare, 1623)
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