



HONG KONG CONTINENCE SOCIETY  
香港理遺學會

# Newsletter

Issue 21, Dec 2009

Special events  
in the period of  
time:

1. Hong Kong  
Guangzhou  
Symposium
2. ASM & AGM  
2009
3. ICS 2009

Highlights:

- 壓力性尿失禁之治療  
Dr. Winne Lau
- Management of urinary  
incontinence in  
children by Dr.  
Michael Leung
- Physiotherapy Mgt for  
Faecal Incontinence in  
Children by Amy  
Chung

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## Hong Kong Guangzhou Symposium

10 July 2009



Participants and council  
members



Hong Kong Guangzhou specialists



Chairman, Dr. Leung on the stage



Souvenirs presentation

24 Oct 2009



Council members and Guangzhou  
specialist



Ms Chan Sau Kuen on he stage

# Highlights 1 (Hong Kong Guangzhou Symposium 2009)

## 壓力性尿失禁之治療 By Dr. Winnie Lau, Consultant (O & G)

若一個人不能自主地控制小便排放而在不適當的時間及地點排出小便, 這便是小便失禁。小便失禁或遺漏是很常見的, 平均約有百分之十五至二十的婦女有小便失禁的問題。

### 常見的小便失禁種類

壓力性失禁  
急切性失禁  
滿溢性失禁  
功能性失禁  
夜遺小便



### 壓力性失禁的成因:

由於支撐膀胱頸與尿道的韌帶和骨盤肌肉鬆弛了, 當膀胱內壓力增加時便會產生失禁的現象, 如在咳嗽、打噴嚏、做運動或拿重物時不自主地漏出尿液。

### 小便失禁的後果:

- 尿液會刺激皮膚, 容易引起皮膚發炎、疼痛
- 影響日常活動, 家務
- 影響做體力工作的能力, 如運動, 跑步, 體操等
- 影響人際關係社交生活, 減少會見朋友
- 影響個人情緒, 甚至家庭生活
- 增加經濟負擔

### 治療方法:

#### 骨盤肌肉運動:

以減低骨盤肌肉的鬆弛情況

#### 外科手術:

##### (i) 陰道懸吊術:

手術性質 -

用線把膀胱頸附近陰道組織拉高至盤腔兩邊內側的韌帶 (Cooper's ligament)

成功率 : 九成或以上

腹式 / 腹腔鏡式

##### (ii) 無張力中段尿道懸吊術:

手術性質 - 用特殊的纖維帶由陰道小切口放入, 由恥骨或大陰唇上切口穿出

成功率 : 九成或以上



Dr. Winnie Lau, PYNEH

### Management of Urinary Incontinence in Children by Dr. Michael Leung, Consultant (Surgical), QEH

Urinary incontinence is a distressing condition affecting children. Prevalence of daytime incontinence is reported from 5.5% to 6.3%. In a local survey, the prevalence of nocturnal incontinence of local Chinese school children is 3.5%.

According to the recent definition of International Children's Continence Society (ICCS), urinary incontinence means uncontrollable leakage of urine, which can be continuous or intermittent.

Continuous incontinence is a condition almost exclusively associated with congenital anomaly of urogenital tract (e.g. ectopic ureter) or iatrogenic condition (e.g. injury to external urethral sphincter). Intermittent incontinence is leakage of urine in discrete amounts. In ICCS, definitions of intermittent incontinence are applicable for children over 5 years old. The children can be suffered from daytime and/or nocturnal incontinence.

Normal urinary frequency is defined as 4 to 7 times per day. Urinary incontinence may be associated with increased or decreased urinary frequency. Other urinary symptoms include urgency, nocturia, hesitancy, straining, weak stream and intermittency. In history taking, associated bowel symptoms and psychomotor symptoms should also be asked.

Dr. Michael Leung, QEH





Physical examination is important to pick up clinical signs including palpable bladder, sacral spine anomaly and cutaneous sacral marks. Rectal examination and lower limb neurological examination should be performed for patients with suspected neurologic causes of urinary incontinence.

Bladder diary is routinely used for detection of urinary frequency, bladder capacity, incontinence episodes, nocturnal incontinence, fluid intake and bowel motion. USG bladder can detect bladder thickness, post-void urine volume and hydronephrosis. Other laboratory tests including urine analysis to exclude urinary tract infection and diabetes and blood for renal function may be useful in suspected organic causes of incontinence.

Uroflowmetry is useful to measure the flow rate, flow curve shape and post-void residual urine. We do not recommend routine performance of cystometry in children without organic causes of incontinence. However, urodynamics may be useful in selected cases. It can be done with insertion of supra-pubic or urethral catheter. During urodynamic study, either natural filling or conventional filling of bladder can be used. Video urodynamic study can be done in patient with suspected urethral anomaly, detrusor sphincter dyssynergia or vesicoureteric reflux. By cystometry, detrusor activity/overactivity, bladder capacity and compliance, sphincter competence and activity can be measured.

Treatment of urinary incontinence in children is often multi-disciplinary and individualized according to different diagnosis. In general it can be categorized into urotherapy, medications, behavior therapy, clean intermittent catheterization and surgery.

Urotherapy is a non-pharmacological, non-surgical treatment for patient with incontinence. Different modality of treatment aimed at behavioral modifications, education on diet and drinking habits, voiding posture, pelvic floor relaxation, biofeedback, neuromodulation, bowel management and acupuncture can be performed. Alarm clock may be useful in selected children with nocturnal incontinence.



Antimuscarinics such as oxybutynin and tolterodine are useful in treatment of detrusor overactivity. Tricyclic anti-depressant (imipramine) and desmopressin (minirin) has been used in treatment of nocturnal incontinence. Alpha-blocker may be useful in patients with bladder neck dysfunction, are not commonly prescribed and should be used with caution.

In children with low compliance bladder and compromised bladder emptying efficiency, clean intermittent catheterization should be considered to prevent urinary tract infection and protect upper urinary tract.

Surgery is required only in selected group of patients with urinary incontinence. In boys with posterior urethral valve, cystoscopy and valve ablation can be performed. Cystoscopic botulinum toxin injection of detrusor muscle is recently performed in patients with intractable detrusor overactivity. Bladder augmentation should be considered in patients with low compliance bladder endangering upper urinary tract, not responding to antimuscarinics and clean intermittent catheterization.

Urinary incontinence is a common condition in children which can be associated with significant psychomotor impact. History taking, physical examination, bladder diary, USG and uroflowmetry are useful to assess the cause and severity of incontinence. In selected patients, cystometry and other laboratory investigations is helpful. Treatment of incontinence is often multi-disciplinary, with combination of urotherapy and medications. Clean intermittent catheterization and surgery is reserved for selected patients with organic and/or complicated incontinence problems.



## Physiotherapy Management for Faecal Incontinence in Children

By Amy Chung, Physiotherapy Department, QEH

Faecal incontinence is a multi-factorial sequela. It is not uncommon in children especially those with anorectal malformation (ARM), affecting 1 in 4000 to 5000 newborns. Since 2001, we collaborated with Department of Surgery of Queen Elizabeth Hospital to provide service for children with faecal incontinence after surgery for ARM.

The continence program was conducted to improve patients' functional outcomes and empower their home management. A retrospective study was carried out to evaluate the effectiveness of such physiotherapy interventions for improving faecal continence. Children aged 5 years or above presented with faecal incontinence after surgery for ARM were included. The program included six-month department-based treatment and six-month home-based training with monthly follow-up. EMG biofeedback, electrical stimulation and pelvic floor muscle training were delivered. Outcome measures including EMG biofeedback, Rintala questionnaire score and soiling rank were recorded at initial, 6-month and 12-month intervals. Paired t-test was used for EMG comparison while Wilcoxon signed ranks test was used for Rintala questionnaire score and soiling rank comparison.



Ms Amy Chung, QEH





A total of 45 children were recruited in the program. Twenty-nine children (19 boys and 10 girls) completed the one-year program, ten children were continuing with the program and six children had defaulted. The mean age was  $8.21 \pm 3.669$ . There was satisfactory improvement in all outcome measures at 6-month and 12-month interval. For EMG biofeedback, it increased from  $1.667 \pm 0.76\text{mV}$  to  $3.149 \pm 1.452\text{mV}$  (+88.9%,  $p < 0.001$ ) at 6-month and to  $3.739 \pm 2.464\text{mV}$  at 12-month (+124.3%,  $p < 0.001$ ). For Rintala questionnaire score, it increased from 13.33 to 15.66 (+17.5%,  $p < 0.001$ ) and to 16.41 (+23.1%,  $p = 0.001$ ) at the respective time interval. For soiling rank, it improved from 3.059 to 4.219 (+37.9%,  $p < 0.001$ ) and to 4.500 (+47.1%,  $p < 0.001$ ) respectively.

In conclusion, physiotherapy intervention is beneficial for children with faecal incontinence after surgery for ARM. Improvement was not only shown in the physical parameters, but also in the psychosocial function, which is an important element for the normal development of children.



## AGM & ASM on 19 Sept 2009



**Office Bearers (2008-2009) :**

**President:**

Leung Man Fuk

**Vice President:**

Cheon Willy, Cecilia

**Honorary Secretary:**

Ms. Lam Mo Ching

**Honorary Treasurer:**

Dr. Tam Cheuk Kwan  
(Webmaster)

**Council members:**

Ms. Chan Sau Kuen

Dr. Fenn John (Representative at FMSHK)

Ms. Ip Kam Tin

Ms. Siu Ching Lee, Patricia

Ms. Siu Lai Sheung, Katherine

Dr. Tong Bing Chung

Ms. Hui Peggy (Newsletter Editor)

Ms. Fung Brigitte

Dr. Leung Michael

Dr. Ho Kwan Lun

Dr. Lau Winnie

**Welcome to new council members**



**Ms Patricia Lee (NS),  
Shatin Hospital**



**39th Annual Meeting of the International Continence Society at San Francisco, USA**



Girls choir at the opening Ceremony



Council members (from left: Dr. Leung, Regina, Sau Kuen & Dr. Tam) at the booth