UNIT NO. 3

CONTINENCE

Dr Terence Tang

ABSTRACT

In Singapore, the prevalence of UI among community-dwelling older adults was reported as 3.5% in those aged ≥ 55 years, 4.8% in those aged ≥ 65 years, and 7.9% in those aged ≥ 75 years. Although UI is not a life threatening problem, the symptoms of incontinence can cause considerable impairment. A questionnaire like the International Consultation on Incontinence Questionnaire Urinary Incontinence-Short Form (ICIQ-UI SF) is the simplest form of screening for continence status in both the community and primary care settings.

SFP2011; 37(2) Supplement : 24-27

BACKGROUND

The International Continence Society (ICS) defines Urinary Incontinence (UI) as a condition where involuntary loss of urine is a social or hygienic problem. In Singapore, the prevalence of UI among community-dwelling older adults was reported as 3.5% in those aged ≥ 55 years, 4.8% in those aged ≥ 65 years, and 7.9% in those aged ≥ 75 years. Although UI is not a life threatening problem, the symptoms of incontinence can cause considerable impairment. UI is associated with a low quality of life in adults, especially women.

ASSESSMENT

A questionnaire like the International Consultation on Incontinence Questionnaire Urinary Incontinence-Short Form (ICIQ-UI SF) is the simplest form of screening for continence status in both the community and primary care settings. Basic questions like frequency and quantity of leakage, as well as impact of incontinence on the quality of life, should be included in the assessment of continence.

For further details about the ICIQ-UI SF, refer to Annex C1.

INTERPRETING RESULTS

Individuals who score 1 or greater in the ICIQ-UI SF are recommended to visit a primary care doctor for further evaluation.

TERENCE TANG, Senior Consultant, Department of Geriatric Medicine, Khoo Teck Puat Hospital

PRIMARY CARE ROLES AND RESPONSIBILITIES

CLINICAL EVALUATION

1. History taking should include the following:

i. Details of UI

- Onset/duration/progress/severity/pattern of occurrences (e.g. only in the night)
- Accompanying symptoms that characterise urinary incontinence include:
  - Voiding symptoms: such as hesitancy, intermittency, terminal dribbling, urinary retention.
  - Storage symptoms: such as urgency, stress symptoms, frequency, nocturia.
  - Atypical symptoms: such as dysuria, haematuria, bowel incontinence, lower limb weakness/numbness.

ii. Bowel movement

- Symptoms of constipation and/or faecal impaction.

iii. Past medical history

Pay attention to:

- Diabetes mellitus.
- Stroke.
- Spinal cord diseases.
- Parkinson's disease.
- Arthritis.
- Prostate diseases.
- Pelvic malignancies.
- Previous pelvic surgery.
- History of radiation therapy to the pelvic region.

iv. Medications

Pay attention to:

- Cholinergic agents.
- Anti-cholinergic agents.
- Diuretics.
- Sedatives.
- Anti-depressants.

v. Brief assessment of ability to access the toilet

- Restricted mobility.
- Cognitive impairment.
- Environmental barriers.

2. Brief physical examination should include the following:

- Abdominal examination.
- Rectal examination.
- Pelvic examination for women.

- Neurological examination (minimally of the lower limbs).
- Brief assessment of cognition and gait for accessibility of the toilet.

3. Office based investigation should include the following:

- Urine Dipstick – to identify blood, leukocytes, glucose in urine.

MANAGEMENT

The main goals of the evaluation are:

1. To discover reversible conditions.
2. To uncover sinister conditions requiring further evaluation and management.

Based on the above evaluation one should be able to rule out the common reversible causes of UI:

1. Delirium (acute change in cognition).
2. UTI.
3. Atrophic vaginitis.
4. Medications.
5. Psychological causes (anxiety, depression).
6. Endocrine causes (diabetes mellitus, hypercalcemia).
7. Restricted mobility.
8. Stool impaction.

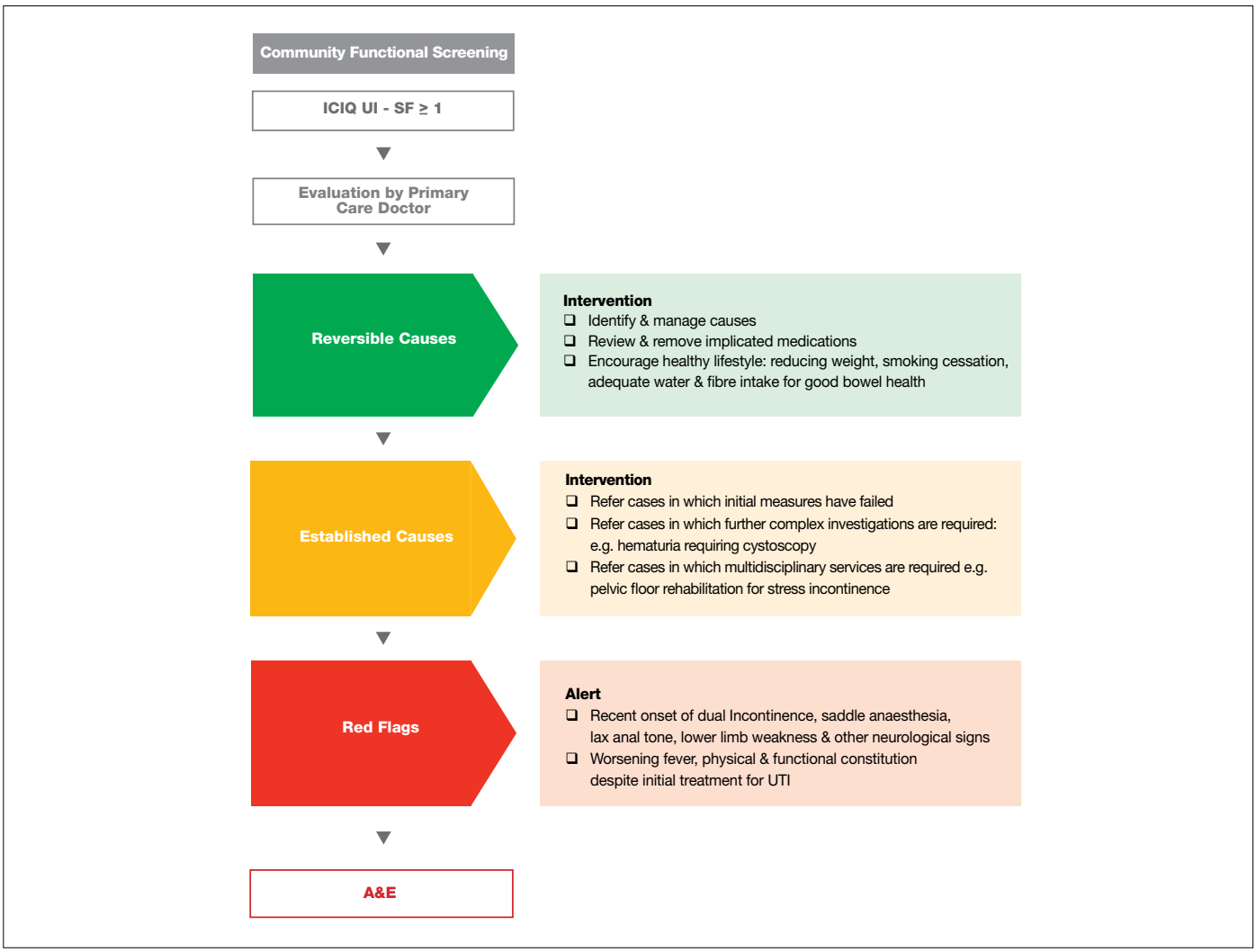
Simple continence management tips include:

1. Recommend (& teach) Kegel exercises to patients as it helps strengthen pelvic floor muscles that control urination.
2. Recommend toilet scheduling to help them achieve bladder control.
3. Recommend use of pads and absorbent garments as and when deemed essential.
4. Other methods of managing incontinence e.g. the use of a Urinary catheters as deemed appropriate after evaluation.

CLINICAL PATHWAY

The clinical pathway to take from screening to intervention is shown in Figure 1.

Figure 1: Clinical pathway from screening to intervention



Source: 'Community Functional Screening Follow Up Resource for Primary Care Doctors', March 2011

REFERRAL

Primary care doctors should be aware that spinal cord diseases can present as loss of bladder or/and bowel control.

Warning signs include a recent onset of dual incontinence, 'saddle anesthesia', lax anal tone, lower limb weakness and other neurological signs.

In the event of an impending spinal cord or nerve root compression, the patient should be directed for emergency care.

The causes of UI are often multi-factorial. The reversible causes are often the precipitant of the final event – UI.

These can be characterised as follows (Figure 2).

Figure 2: Predisposing conditions and characteristics of UI

	Predisposing conditions & characteristics	Clinical evaluation & management by:
1	Overflow incontinence that arises as a result of an obstructed bladder and/or a hypo-contractile bladder that is often insensate	Urologist, Urogynaecologist or specialist in continence management
2	Stress incontinence	
3	Urgency incontinence	
4	Functional incontinence due to environmental hindrances that exacerbate an already compromised access to the toilet	Geriatrician and Occupational Therapist

Source: 'Community Functional Screening Follow Up Resource for Primary Care Doctors', March 2011

RESOURCES

For further information, prescribe to the patient:

- HealthLine - 1800 223 1313 to speak to a Nurse Advisor (available in 4 languages)
- Health Promotion Board website - http://www.hpb.gov.sg

LEARNING POINTS

- **Basic questions like frequency and quantity of leakage, as well as impact of incontinence on the quality of life, should be included in the assessment of continence.**
- **The main goals of the evaluation are: (1) To discover reversible conditions, and (2) To uncover sinister conditions requiring further evaluation and management**
- **Recommend (& teach) Kegel exercises to patients as it helps strengthen pelvic floor muscles that control urination.**
- **Primary care doctors should be aware that spinal cord diseases can present as loss of bladder or/ and bowel control.**
- **In the event of an impending spinal cord or nerve root compression, the patient should be directed for emergency care.**

ANNEX C1 – INTERNATIONAL CONSULTATION ON INCONTINENCE QUESTIONNAIRE URINARY INCONTINENCE-SHORT FORM (ICIQ-UI SF)

Many people leak urine some of the time. We are trying to find out how many people leak urine, and how much this bothers them. We would be grateful if you could answer the following questions, thinking about how you have been, on average, over the PAST FOUR WEEKS.

1 Please write in your date of birth: ☐☐ ☐☐ ☐☐

DAY MONTH YEAR

2 Are you *(tick one)*: Female ☐ Male ☐

3 How often do you leak urine? *(Tick one box)*

never	☐	0
about once a week or less often	☐	1
two or three times a week	☐	2
about once a day	☐	3
several times a day	☐	4
all the time	☐	5

4 We would like to know how much urine <u>you think</u> leaks.
How much urine do you <u>usually</u> leak (whether you wear protection or not)?
(Tick one box)

none	☐	0
a small amount	☐	2
a moderate amount	☐	4
a large amount	☐	6

5 Overall, how much does leaking urine interfere with your everyday life?
Please ring a number between 0 (not at all) and 10 (a great deal)

0 1 2 3 4 5 6 7 8 9 **10**
not at all a great deal

ICIQ score: sum scores 3+4+5 ☐☐

6 When does urine leak? *(Please tick all that apply to you)*

never – urine does not leak	☐
leaks before you can get to the toilet	☐
leaks when you cough or sneeze	☐
leaks when you are asleep	☐
leaks when you are physically active/exercising	☐
leaks when you have finished urinating and are dressed	☐
leaks for no obvious reason	☐
leaks all the time	☐

Thank you very much for answering these questions.

"The above extract is taken from the 'Community Functional Screening Follow Up Resource for Primary Care Doctors', published by the Health Promotion Board in partnership with Dr Terence Tang, March 2011.".