

INTRODUCTION OF A TRIPLE SCREENING ASSESSMENT TOOL TO IMPROVE THE EARLY IDENTIFICATION OF URINARY INCONTINENCE, DELIRIUM AND OSTEOPOROSIS RISK IN ELDERLY PATIENTS.

Hypothesis / aims of study

The close association between urinary incontinence, delirium and falls/fracture in the elderly population is well documented and introducing measures to screen for and address these issues early will improve patient care and reduce morbidity.

Study design, materials and methods

The medical notes of 20 elderly patients (9 male; 11 female) admitted to a UK district general hospital were audited to assess whether patients had been screened for incontinence, delirium or osteoporosis risk since their admission to hospital in October 2012.

Of 20 patients, 13 (65%) had been asked about continence issues and of 9 patients with some degree of incontinence only 1 case (11%) was distinguished as stress or urge. An AMTS score was recorded for 7 patients (35%) and no further screening tools for delirium had been employed. Despite 19 patients (95%) being 'at risk' for osteoporosis only 1 patient (5%) had been screened using the FRAX score.

The need for improvement was identified and a 'Triple Screening Assessment Tool' was developed to prompt clinicians to screen patients for the following:

1. Urinary incontinence – ICIQ-UI questionnaire [1]
2. Delirium - AMTS score and CAM score [2]
3. Osteoporosis screening - FRAX score [3]

Doctors in elderly medicine were trained in the use of the Triple Screening assessment tool prior to its introduction to the ward in November 2012. The aim was to perform the Triple Screening assessment for every patient within 24 hours of admission.

Results

20 patients' notes (7 male; 13 female) were re-audited in December 2012.

- 1) The Triple Screening assessment was performed in 11 cases (55%) and the majority had been conducted on the first day the patient arrived on the ward
- 2) 18 patients (90%) were asked about continence issues and 13 patients (65%) had some incontinence issues
- 3) Urge and stress incontinence was distinguished in 3 (23%) cases of incontinence
- 4) 5 out of 13 patients (38%) with incontinence had a physical examination specifically targeted at incontinence
- 5) 2 patients (10%) were commenced on anti-cholinergic drugs
- 6) 16 patients (80%) had an AMTS performed on admission
- 7) A CAM score had been performed in 9 (45%) patients and in 2 patients (10%) the result was positive with subsequent intervention
- 8) 16 patients (80%) were 'at risk' of osteoporosis and 9 patients (45%) had a FRAX score calculated. Of the 'at risk' patients, 7 (44%) had been commenced on preventative medication

Interpretation of results

The results demonstrate successful implementation of the Triple Screening assessment tool. There was a noticeable increase in the use of all three screening tools (ICIQ-IU, CAM and FRAX) and this improved the identification of patients with incontinence, delirium and osteoporosis risk. The necessity and value of the Triple Screening assessment tool can be further justified by the fact that several patients were commenced on medications for incontinence and osteoporosis and that delirium was identified and treated early-on during the admission.

Concluding message

The Triple Screening assessment tool is an effective method of improving early identification of incontinence, delirium and osteoporosis risk in elderly inpatients. The Triple Screening tool will continue to be audited and developed with the view to extending its use in elderly medicine according to national guidelines.

References

1. NICE Guidance: Urinary incontinence: the management of urinary incontinence in women. Clinical guidelines, CG40 - Issued: October 2006
2. BGS Clinical Guidance: Guidelines for the prevention, diagnosis and management of delirium in older people in hospital. January 2006.
3. NICE Guidance: Osteoporosis: assessing the risk of fragility fracture. Clinical guidelines, CG146 – Issued: August 2012

Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** This was an audit of patients' medical notes and service improvement only. **Helsinki not Req'd:** This was an audit of patients' medical notes and service improvement only. **Informed Consent:** No