The Management Of Atrial Fibrillation At The Front Door

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Fig 1 A&E Protocol based on 2006 NICE Guidelines [1].

Introduction & Aims

Atrial Fibrillation is the commonest presenting cardiac arrhythmia, with a prevalence of 90-80 year olds, and accounting for 3-6% of acute admissions to hospital in the UK.

This is an audit which aims to review the management of atrial fibrillation or flutter (AF) in an Accident and Emergency Department (A&E) where there is an established Acute Medicine team. 2006 NICE guidelines for AF were used as the standard [1].

It also reviews whether appropriate antithrombotic therapy was administered using appropriate stroke risk stratification.

This is a re-audit. The previous audit in 2007 revealed the inappropriate use of Digoxin in the management of FAF. Beta-blockers and DC cardioversion were underused.

Following this audit a protocol for the management of FAF was instituted, based on the NICE guidance (Fig 1). All doctors and nurses in A&E were made aware of this protocol at departmental meetings.

Methods

The following standards were set:

1. All patients should receive treatment as per the NICE 2006 Guidelines for AF.
2. Where Digoxin is prescribed first line, this is done appropriately and the reasons for this documented.
3. All patients should receive appropriate antithrombotic treatment as guided by an appropriate risk stratifying system, e.g. CHADS2 [2].

Patients coded for ‘arrhythmia’ were identified from the A&E computer database.

Starting in August 2009, 189 consecutive admission electronic records were reviewed (both the scanned A&E notes and the electronic discharge summary).

From these 50 patients (>18 years) were identified as having AF/Flutter with a ventricular rate > 100.

Data pertaining to the patient demographics, clinical features, drugs/management used, antithrombotic use, CHADS2 score and patient outcome were recorded in a proforma.

Rhythm or Rate?

Many instances both rate and rhythm treatment choice is balance of various factors - choose options with patient

Rhythm vs Rate?

- Many instances both rate and rhythm treatment choice is balance of various factors
- Choose options with patient

Table 1: Life threatening AF

<table>
<thead>
<tr>
<th>AF</th>
<th>Prior to onset of AF</th>
<th>AF secondary to treated/untreated compensated/ uncontrolled heart failure</th>
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<tr>
<td>Yes</td>
<td>Yes</td>
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Results

Chart 1 shows the age distribution and 2 the % with presenting rhythm. The minimum ventricular rate was 114 beats/min. 64% of patients were managed in A&E Resus and 30% in Majors.

42% of patients were in AF on discharge, of these 95% were on antithrombotic therapy. 10 patients had a CHADS2 score of >1. Of these 3 had risk stratification documentation on admission and 6 were planned for warfarin on discharge.

Chart 2: Showing the % of patients with antithrombotic therapy.

Conclusion

Following the previous Audit there has been an improved compliance with the NICE guidelines. More patients are being appropriately prescribed beta blockers and having acute DCCV. Although the use of digoxin is less it still continues to be overused.

Most of the patients received antithrombotic therapy, however more could have been discharged on warfarin. Documentation of risk stratification for stroke needs to improve. CHADS2 scoring could be added to the protocol.

Acknowledgements

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References
