PERTH CARDIOVASCULAR INSTITUTE

LEADERS IN CARDIOLOGY

ATRIAL FIBRILLATION AND STROKE RISK

PT 1 – PROTECTING THE AF PATIENT FROM STROKE

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The facts

- Atrial fibrillation (AF) is the most common disabling cardiac arrhythmia
- Overall lifetime risk for AF is one in 4 for men and women aged ≥40
- Patients with AF have twice the annual mortality and a 1 in 3 lifetime risk of stroke with a recurrence rate of 10% per year.
- Strokes with AF tend to be worse
- Paroxysmal and chronic AF confer similar risks of stroke.

Preventing stroke is the key!

This is the number 1 priority. Don't diagnose AF and just refer the patient on without considering immediate anticoagulation.

For nonvalvular AF (no mitral stenosis, severe MR or prosthetic valve) the most widely used estimate of risk of stroke in AF is the **CHA2DS2-VASc score:**

	CONDITION	POINTS
C	Congestive heart failure (or Left ventricular systolic dysfunction)	1
H	Hypertension: blood pressure consistently above 140/90 mmHg (or treated hypertension on medication)	1
A_2	Age ≥ 75 years	2
D	Diabetes Mellitus	1
S_2	Prior Stroke or TIA or thromboembolism	2
V	Vascular disease (e.g. peripheral artery disease, myocardial infarction, aortic plaque)	1
A	Age 65 - 74 years	1
Sc	Sex category (i.e. female gender)	1

Reference: **http://en.wikipedia.org/wiki/CHADS2_score#CHA2DS2-VASc**

You can download a calculator from this site **www.mdcalc.com/cha2ds2-vasc-score-for-atrial-fibrillation-stroke-risk/**

It is generally agreed that a score >2 warrants anticoagulation provided the bleeding risk is not much higher than the **HASBLED** score which assesses bleeding risk with points for **H**ypertension, **A**bnormal kidney or liver function, **S**troke, **B**leeding (PH bleeding, anemia or predisposition to bleeding), **L**abile INR, **E**lderly (>65) or **D**rugs and/or alcohol

Note: CHA2DS2-VASc ignores whether AF is symptomatic or not, permanent or not, present at time of assessment or not or whether the patient is to be rate or rhythm controlled. **The characteristics of the AF do not significantly affect risk.**

Which anticoagulant?

- Aspirin not useful for AF
- Warfarin with INR 2.0-3.0 proven, and well established as are its limitations
- New anticoagulants (Dabigatran, Rivaroxaban are as effective and as safe as warfarin with these important differences:
  - Act immediately so immediate protection with no delay achieving effective anticoagulation or need for bridging Clexane
  - Not affected by diet or most drugs
  - Can't be used in renal failure (CrCl <30)
  - No antidote
  - No need for monitoring except for renal function as required
  - However no easy monitoring of compliance
  - Expensive (should be on PBS soon)

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