Helping people with communication difficulties after stroke to understand warfarin therapy

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What is aphasia?

- Loss or impairment of language function caused by brain damage
- Aphasia is a multimodal disorder:
- Difficulties in speaking, understanding, reading, writing
- Reduction in capacity to interpret and formulate linguistic elements (e.g. sentences, words, morphemes – the smallest grammatical unit in a language)

Murdoch (2010)
Who experiences aphasia?

- People who have had a
  - stroke
  - Brain tumour (primary or secondary)
  - Traumatic head injury
  - Hypoxic brain injury
Who needs anticoagulation

- Stroke - AF

Other reasons

- Deep Vein Thrombosis
- Pulmonary Embolus
- Mechanical heart value
- Pulmonary hypertension
- Severe cardiomyopathy
Atrial Fibrillation – some facts

- Prevalence - 1.7% in England in 2012/13
- Incidence of stroke attributable to AF is 1.5% in those aged 50 to 59 years
- It rises to 23.5% for between 80 and 89 years
- Counselling elderly patients many with multiple co-morbidities, polypharmacy and reduced cognition challenging
- In addition some of those will already have suffered a stroke which may result in pre-existing aphasia
Which anticoagulant?

Warfarin

Advantages of warfarin
• Tried and tested
• well tolerated
• easy to monitor adherence
• keeps you connected with health system
• More experience in reversing and antidote available

Disadvantages of warfarin
• Complex dosing regimen
• Slow onset
• Frequent monitoring trips
• Drugs and food interaction
What about DOACs (direct oral anticoagulants)?

Advantages of DOACs

• Simple dosing regimens
• fast acting (vs warfarin can take ages to get to an effective level)
• less drug and food interaction
• less treatment burden (convenience)
• Some DOACs can be put in compliance aids

Disadvantages

• DOAC less well tolerated (eg one in five people stop after 2 year, rash, headache, fuzziness, GI side effect (diarrhoea can be disabling)
• Other than dabigatran, no licenced antidote
NPSA 2006
Anticoagulant risk assessment

• ‘Several participants with strokes stressed the need for doctors to give appropriate time to patients with aphasia to ensure that they properly understood their medication.’

• You WILL need extra time to counsel the patient with aphasia

So, a new tool may help........
What do we use now?

- Anticoagulation therapy Pack ("yellow book")
  - Patient information booklet
  - Alert card for patient
  - Record of INR book
  - Treatment sheets
What do we need to communicate effectively to patient with aphasia?

- Short message
- Clear sentences
- Easy words
- Good layout
- Diagrams and pictures
- Appropriate font
What did we create

• Learning event with pharmacist and speech and language therapist
• Agreed on simple, accessible, online tool which can be downloaded for local use
• Powerpoint slides using SLT guidance for presentation and pharmacist guidance for content
• For example.....
**Oral anticoagulants**

An anticoagulant medicine prevents harmful blood clots from forming in your blood vessels by making your blood take longer to clot.

Warfarin is the most commonly used oral anticoagulant in this country. Others that may be used include phenindione (Dindevan®) andacenocoumarol (Sinithrome®) and they are similar to warfarin in many ways including the side effects and monitoring requirements.

**How do I take my anticoagulant?**

Take your anticoagulant once a day, at about the same time, washed down with a full glass of water.

If you miss a dose, or take the wrong dose by mistake, make a note in this booklet. Take only your normal dose the next day. If the dose you took in error greatly exceeded your normal dose please contact your anticoagulant clinic.

You may be given a number of different strength tablets to make up your dose, and it is important that you become familiar with the different strengths and colours that you need to take.

In the UK, the colours of warfarin tablets are:

<table>
<thead>
<tr>
<th>Dose (mg)</th>
<th>Colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5 (500 micrograms)</td>
<td>white</td>
</tr>
<tr>
<td>1</td>
<td>brown</td>
</tr>
<tr>
<td>3</td>
<td>blue</td>
</tr>
<tr>
<td>5</td>
<td>pink</td>
</tr>
</tbody>
</table>

Different brands of warfarin tablets may have different markings to those shown above. Other anticoagulants may come in different strengths and colours.

You may need a mixture of different coloured tablets to make up your dose. Your healthcare professional will explain this to you.

**Do not confuse the dose in mg with the number of tablets that you take.**
Your new tablet is Warfarin
The tablets are different strengths

1mg  3mg  5mg
Take Warfarin once a day

When will you remember to take it?
Monitoring you while you are taking an anticoagulant

You must have a regular blood test called an INR test. INR stands for International Normalised Ratio.

This is a standard test that measures how long your blood takes to clot. Normally, blood that is not anticoagulated has an INR of approximately 1.0. The dose of anticoagulant that you need to take will depend on your INR test result. If your result is out of the range appropriate for your condition, your dose of anticoagulant will be increased or decreased accordingly. The anticoagulant dose required to achieve the target INR varies for each person.

**JAN**

MON 14

TUE 15

**WED 16** Blood test

THU 17

FRI 18

SAT 19

SUN 20
You will need regular blood tests

• The test is “INR”

• It shows how much warfarin you need

• If you are ill you need an extra blood test that week
Diet

It is important to eat a well balanced diet.

Consult your doctor or practice nurse if you need to diet to lose weight.

Any major changes in your diet may affect how your body responds to your anticoagulant medication.

Foods rich in vitamin K may affect your INR result. Such foods include green leafy vegetables, chick peas, liver, egg yolks, cereals containing wheat bran and oats, mature cheese, blue cheese, avocado and olive oil. These foods are important in your diet but eating them in large amounts may lower your INR result. Try to take the same amount of these foods on a regular basis. It is the change in the vitamin K intake that affects your INR result. Drinking cranberry juice can also affect your INR and so should be avoided altogether if possible.

If your diet changes greatly over a seven-day period, you should have an INR test.
Foods

All foods are okay

Keep what you eat the same each week
Alcohol

It is recommended that you do not exceed the national guidelines. These are up to three units a day for men, and up to two units a day for women. One pint of beer is two units; one pub measure of a spirit (25ml) is one unit; and one pub measure of wine (125ml) is one unit.

It is dangerous to ‘binge drink’ while taking anticoagulants.
Do not drink lots of alcohol

Keep what you drink the same each week
Summary for healthcare professionals

- Blood tests (INR)
- Take Warfarin every day
- No big changes to diet
- No binge alcohol
- If very ill get extra blood test that week
- Tell family and health professionals you are on Warfarin
Where can you get a copy?

Tool freely available to download

https://www.sps.nhs.uk/articles/warfarin-consultation-for-patients-with-aphasia/

Now includes DOACs
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