FOR SHORT ANSWERS
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FOR LONG ANSWERS
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CASE REPORT Sprouting a warfarin interaction

A 70 year old woman was admitted with increasing shortness of breath and feeling generally unwell. The onset of these symptoms had coincided with a mild worsening of her angina.

Her medical history included recurrent pulmonary emboli for which she was on lifelong warfarin (15 mg/day, international normalised ratio (INR) stable and therapeutic), an episode of severe pneumonia that necessitated admission to intensive care, and exertional angina for which she used a glyceryl trinitrate spray. She was on no additional medication, and described herself as being "very healthy," taking great pride in maintaining a nourishing diet rich in fruit and vegetables.

On examination the patient was alert and orientated. Respiratory rate was mildly increased, but blood pressure and oxygen saturations were normal. She had right sided bronchial breathing, and plain film radiographs showed right perihilar consolidation. She was treated for community acquired pneumonia with intravenous cefuroxime and oral doxycycline, as per local hospital trust guidelines.

Two days after admission the patient showed clinical and subjective improvement. The haematology laboratory then phoned the doctor on call to say that the patient's INR was greater than 15. There was no evidence of active bleeding. Following advice from a haematologist, the patient was treated with vitamin K. Over the next few days the INR decreased until the patient was deemed fit for discharge.

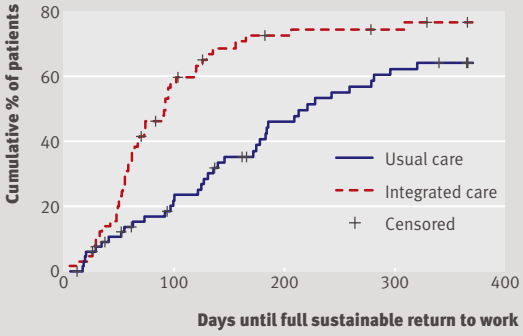
1 What is the mechanism of action of warfarin?
2 What are the possible causes of this patient's raised INR?
3 How should a raised INR be managed in the acute setting?
4 How should warfarin be recommenced in this patient?

Submitted by Lawrence R Kidd and D H Hanumantharaya
Cite this as: *BMJ* 2010;341:c2621

STATISTICAL QUESTION Survival (time to event) data II

Last week's question described survival (time to event) data. The example used was a randomised controlled trial, which compared the effectiveness of an integrated care programme with usual care in facilitating the return to work for patients with chronic low back pain. The integrated care programme was a combined patient and workplace directed intervention.

Trial participants were adults aged 18-65 years who had had low back pain for more than 12 weeks, were in paid work, and were absent or partially absent from work. The primary outcome was duration of time off work after randomisation until a fully sustained return to work. Trial participants were followed for 12 months (figure).



Kaplan-Meier survival curves for the integrated and usual care interventions of the time until a fully sustained return to work for patients with chronic low back pain

Which of the following, if any, are true?

a) Survival curves change in probability only when participants achieve a fully sustained return to work
b) The survival curves do not reach 100% because observations were censored at 12 months
c) The curves represent the probability of a fully sustained return to work by a particular time after entry to the study
d) The median survival time is six months, halfway through the study period

Submitted by Philip Sedgwick
Cite this as: *BMJ* 2010;341:c3665

ON EXAMINATION QUIZ Dermatology

This week's question is taken from the OnExamination revision questions for the MRCP Part 1 exam.

Possible diagnoses

A Acanthosis nigricans
B Behçet's disease
C Dermatitis herpetiformis
D Erythema marginatum
E Erythema multiforme
F Erythema nodosum
G Lupus pernio
H Lyme disease
I Systemic disease of the skin
J Necrobiosis lipoidica diabeticorum
K Pretibial myxoedema
L Pyoderma gangrenosum

Select the most appropriate dermatological diagnosis above for the following case scenarios.

Case scenario 1
A 57 year old man with poorly controlled type 2 diabetes presents to his general practitioner with a rash on his shins. On examination the doctor notes that the lesions are shiny with a yellowish colour and overlying telangiectasia. The patient also has purplish discoloration of the skin overlying his knuckles.

Case scenario 2
A 20 year old man who breeds deer presents to his general practitioner after noticing a small red papule on his chest. The general practitioner asks the patient to return a week later if the lesion does not resolve. A week later the patient presents with a larger lesion in a "ring-like" pattern with a raised border. The patient now also has palpitations and neck stiffness.

Case scenario 3
A 20 year old Trinidadian woman presents to her general practitioner with a painful red eye. The doctor also notices that the patient has a diffuse bluish plaque on her nose and on close inspection small red papules are identified within the lesion.

Case scenario 4
A 50 year old man presents to the emergency department with sudden loss of vision in his right eye. Fundoscopy shows retinal vein occlusion. The patient also has painful ulceration affecting his mouth and groin.

Case scenario 5
A 70 year old man presents to his general practitioner with an eight month history of progressive dysphagia. On examination the patient has rough pigmented thickening of the skin in the axillae with warty lesions.