CASE REPORT

Spontaneous subscapular haematoma in a patient using warfarin therapy

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SUMMARY

Warfarin is widely used. Spontaneous bleeding is one of the complications of warfarin treatment. A 70-year-old man was admitted to the emergency room with right back pain. There was no history of trauma. He was using warfarin following a bypass graft. The patient's vital signs were stable. On physical examination, swelling at the level of the right scapula was detected. Laboratory findings showed that the international normalised ratio (INR) was ↑↑ (a very high reading) (1.47 1 month previously). There was no melena on rectal examination. A chest CT was performed to differentiate the swelling of the right scapula. Warfarin was stopped and vitamin K was administered. Fresh frozen plasma was initiated and the patient was hospitalised to the cardiovascular surgical service. The fact that use of warfarin in the elderly may increase the risk of spontaneous bleeding should be especially kept in mind.

BACKGROUND

Anticoagulant agents are widely used for the treatment of strokes induced by thromboembolism, acute myocardial infarction, pulmonary embolism and deep vein thrombosis.^{1 2} Warfarin is an anticoagulant agent used for treatment and prophylaxis in thromboembolic events or clinical situations where there is a risk of thromboembolism.³ For the safe and effective use of warfarin, it should be monitored using the international normalised ratio (INR).⁴ Bleeding may be due to treatment with heparin and warfarin.^{5–7} It has been reported that an INR value less than 2 in patients increases the risk of thromboembolism, while a value higher than 5 increases the risk of major bleeding.⁸ In a study by Garcia *et al*,⁹ in the first 30 days the bleeding rate in the patients receiving warfarin therapy was 1.3%.⁹

We present a patient with subscapular haematoma, which is very rarely seen.

CASE PRESENTATION

A 70-year-old man was admitted to the emergency room with right back pain. There was no history of trauma. Coronary artery bypass grafting had been performed 1 month previously and he was using warfarin to ensure the success of the graft.

The patient's vital signs were stable (arterial blood pressure 110/70 mm Hg, pulse 88/min, temperature 36.2°C, pulse oximetry 98%). On physical examination, swelling of the right scapula was detected. Laboratory findings showed haemoglobin 8.1 g/dL (14.1 g/dL 1 month previously), haematocrit 24.8% (43.3% 1 month previously),

INR ↑↑ (a very high reading) (1.47 1 month previously). There was no melena on rectal examination. A chest CT was performed to differentiate the swelling of the right scapula. The CT showed a haematoma in the right subscapular muscle (figure 1). Warfarin was stopped and vitamin K administered. Fresh frozen plasma was initiated and the patient was hospitalised to the cardiovascular surgical service.

DISCUSSION

Warfarin-associated haemorrhage can present in different ways. Gastrointestinal system bleeding was more prevalent in some studies, but according to other studies intracerebral haemorrhage was reported more frequently.³ Non-traumatic subscapularis muscle haematoma is very rare. In the literature, only one case, in patient with renal impairment using heparin, has been reported since 1987.¹⁰ Although bleeding occurs in 10–30% of patients receiving long-term anticoagulant therapy,⁶ in our patient it was seen only during the first month of warfarin usage. Different studies have reported that the use of warfarin in advanced age is a risk factor for major bleeding.^{3 9} Our patient was elderly. INR should be monitored frequently in patients who have started treatment for the first time. Follow-up intervals for INR measurement can be extended if the target INR ratio is maintained for 2 weeks. Even if 4 weekly monitoring is routinely recommended, more frequent monitoring results in an increase in the length of time in the

Figure 1 CT showing haematoma in the right subscapular muscle.

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therapeutic range.⁴ In our patient, we thought that INR values were not followed regularly through the patient's own fault. Garcia *et al*⁹ reported that the risk of major bleeding was 0.96% in patients with INR range 5–9, and >9.5% in patients who were found to have an INR ratio of 9.⁹ Another factor is the patient's bleeding risk. We should take special care in the elderly and in patients with decompensated heart failure or active malignancy.⁹

As a result, increasing problems are encountered in patients on warfarin therapy. Knowledge of the approaches to be considered in using warfarin and the factors that alter the activity of warfarin therapy reduces the related complications.

Learning points

- ▶ With the increasing use of drugs such as warfarin, we need to be aware of the effects and side effects.
- ▶ Patients using warfarin need to be followed up closely.
- ▶ Unexpected drug side effects may occur, especially in elderly patients, hence care is required.

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Competing interests None.

Patient consent Obtained.

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