proximal veins and cause symptomatic pulmonary emboli. Detecting postoperative thrombi is of value in identifying those patients who are at increased risk for pulmonary emboli.

Finally, we do not recommend full anticoagulation with heparin for calf thrombi. We do, however, feel that calf clots should not be ignored. Warfarin is used extensively as a prophylactic and therapeutic agent in total joint replacement patients and is associated with a very low complication rate even in elderly patients (Amstutz et al 1989). Our recommenda-tions are that all patients should receive an effective prophylactic agent, while those shown to have calf thrombi should be followed up by duplex ultrasound scanning or receive treatment with low-dose warfarin.

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MEASURING SPINAL RADIOGRAPHS

Sir,

In their paper in your January 1992 issue entitled ‘Can burst fractures be predicted from plain radiographs?’ (1992;74-B:147-50) Ballock et al make the point that approximately 25% of burst fractures cannot be diagnosed from plain radiographs and conclude that CT scanning should be performed on all patients with acute spinal compression fractures in the thoracolumbar region. The radiographs of only one case are shown but unfortunately they do not support the points being made.

I enclose a reproduction of the illustration in the article, which is much below the size of standard spinal radiographs. I have marked the posterior heights of the vertebrae; even on the reduced picture the difference in the posterior heights is 1.5 mm, which is greater than the authors’ criterion for excluding compression fracture. I have also indicated by a curved arrow on the frontal film a major step in the lateral cortex of the vertebral body, measuring more than 3 mm. There can be few radiologists or orthopaedic surgeons who would consider this injury to be a simple compression fracture in the presence of a decrease in posterior vertebral height and a step in the lateral cortical surface.

The point made by the authors is important: it will modify the investigation of a large number of patients. It is unfortunate that the illustration used introduced an element of doubt.

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Authors’ reply:

Sir,

We applaud the close scrutiny of our article. According to Dr Butt’s measurements of our figure, the height difference is 1.5 mm, which would classify the injury as a burst fracture by our own criteria. Our measurement of this difference on the plain radiographs was 1 mm, which was within the precision of the hand-held ruler technique. Fortunately, our pencil marks defining the end-points that we selected are still present on the photographs used for the illustration and confirm this reading. We also note that both of the reviewing radiologists and one of the two reviewing orthopaedic surgeons misdiagnosed this particular injury as a simple compression fracture based on the appearance of the plain radiographs.

Our disagreement with Dr Butt is probably due to the difficulty in the accurate selection of the end-points, particularly on the often poor-quality films taken in cases of multiple injury. We feel that this difficulty reinforces the primary message of our article, which is that plain radiographs are not always reliable in the diagnosis of burst fractures of the vertebral body.

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PATELLAR FRACTURE AFTER GRAFT REMOVAL

Sir,

We read with interest the article in the July 1992 issue by Christen and Jakob entitled ‘Fractures associated with patellar ligament grafts in cruciate ligament surgery’ (1992;74-B: 617-9).

The authors make several important practical points but in their description of the management of the patellar fracture in case 2, they comment that the initial tension-band wiring failed. Their illustration shows only cerclage wiring, which is known to be ineffective for such fractures. In tension-band wiring the wire acts as a dynamic splint, absorbing tensile forces and transferring them into compressive forces at the site of the fracture. To achieve this, the wire must pass over the tension-band side of the bone, rather than circumferentially, as demonstrated in their radiograph.

It is therefore not surprising that the fixation described in their case failed, since although cerclage wiring may help to