To the Editor:
I read with interest the article by Harty et al.\(^1\) The authors put patients on clopidogrel alone and those on clopidogrel and aspirin into a single group. Wilhite et al.\(^2\) reported that combination of both aspirin and clopidogrel resulted in a significantly greater increase in bleeding time compared to either drug alone (aspirin, 6.6±3.52 minutes; clopidogrel, 10.2±5.4 minutes; both, 17.4±4.6 minutes). Patients on combination of aspirin and clopidogrel are at increased risk. Have the authors looked into the difference in outcomes in these 2 subgroups?

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REFERENCES

Authors’ reply:
We agree that patients on the combination of clopidogrel and aspirin have greater increases in bleeding times than those on either aspirin or clopidogrel alone.\(^1\) All our patients on clopidogrel had their surgery delayed for 7 days, based on advice from our anaesthetic colleagues.\(^2\) Based on the manufacturer’s recommendations and the life-span of a platelet, the delay to surgery was to ensure that the effects of clopidogrel (with or without aspirin) were eliminated. Therefore, our patients on the combination of clopidogrel and aspirin were not at increased risk of intra-operative or postoperative bleeding. Nonetheless, such patients may be at higher risk of preoperative morbidity secondary to complications such as cerebrovascular haemorrhage,\(^3\) haematoma formation,\(^4\) or blood loss from other wounds.

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REFERENCES
Management outcome and the role of manipulation in slipped capital femoral epiphysis

To the Editor:
We read with interest the article by Lim et al.1 The authors concluded that manipulation is not recommended in patients with slipped capital femoral epiphysis, because of a higher risk of avascular necrosis. However, no significant differences in outcome or complication rates were shown in their study for those treated with fixation alone or manipulation with fixation. Patients with acute unstable slips undergoing manipulation and fixation within 24 hours have been reported to have better,2 comparable,3 or worse4 results than those undergoing fixation alone or delayed fixation. More randomised controlled trials are needed to answer this question.

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Authors’ reply:
Safety and timing are at stake in acute unstable slipped capital femoral epiphysis. The opinions on manipulation are divergent. Despite favourable results, there is an increased risk of avascular necrosis with manipulation.1 Preoperative gentle straight-leg traction or Russell traction and intra-operative positioning on a traction table have been reported to sufficiently reduce such acute unstable slips.2–4

24 to 72 hours after symptom onset is considered a possible ‘unsafe window’. The risk of avascular necrosis may increase when surgery is performed during this period, because of increased inflammation and synovitis.5–6 Surgery should be performed either within 24 hours or a week after the onset of pain. Early surgery within 24 hours may help improve femoral head blood supply, according to an angiographic study.7

In our study, there was no significant difference in outcome between patients with manipulation and those with preoperative traction and intra-operative positioning. The change in Southwick’s head-shaft angle in both groups was similar. We consider manipulation not necessary, especially when the risk of avascular necrosis is high. A short course of preoperative traction and intra-operative positioning, followed by percutaneous pinning with a single screw, afford the most safety.

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Capsular decompression during internal fixation of intracapsular hip fractures

To the Editor:
We read with interest the article by Wong et al,1 stating that in intracapsular hip fractures capsular decompression may decrease intra-articular pressure and the tamponade effect and therefore improve blood flow, though incising the capsule may damage the anterior vessels. We consider this concern overestimates the importance of anterior vessels.

There are 2 sources of femoral head circulation: (1) intra-osseous cervical vessels that cross the marrow spaces from below, and (2) the arteries of the proximal end of the femur.2 The arteries of the proximal end of the femur are classified into 3 groups: (1) an extracapsular arterial ring located at the base of the femoral neck, (2) ascending cervical branches of the extracapsular ring on the surface of the femoral neck, and (3) the ligamentum teres artery.3 The ascending cervical arteries pass upward under the synovial reflections and fibrous prolongations of the femoral head from its neck. These are known as retinacular arteries,2 and can be divided into 4 groups (anterior, medial, posterior, and lateral) based on their relationship to the femoral neck. Among these, the lateral group provides most of the blood supply to the femoral neck and head. At the margin of the articular cartilage on the surface of the neck of the femur, these vessels form a second ring—the subsynovial intra-articular arterial ring—from which epiphysial branches enter the femoral head.4

The femoral epiphyseal blood supply in adults arises largely from the lateral epiphyseal arteries that enter the head posterosuperiorly and secondarily from the medial epiphyseal artery entering through the ligamentum teres.5 The superior retinacular and lateral epiphyseal vessels are responsible for most of the femoral head circulation.6

We consider that anterior vessels do not contribute largely to femoral head circulation, and therefore damaging them by incision of the capsule does not play any important role in the survival of a femoral head after an intracapsular hip fracture.

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REFERENCES
Authors’ reply:
We agree that anterior vessels do not seem to have an important contribution to the femoral head circulation. However, after an intracapsular hip fracture, the severity of damage to the arterial blood supply of the femoral head is unknown. It is therefore valid to state that incision of the capsule may damage the anterior vessels and therefore further augment the risk of avascular necrosis.

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