The underlying symptoms. We have reviewed attendances related to rowing at Addenbrookes Hospital Sports Injury Clinic between January and June 1988. We were surprised to find that just under a half of the sportsmen and women who attended with rowing-related injuries (22 out of 48) were actually injured out of the boat. These injuries occurred not only during training, either running or weight training, but also during over-vigorous warming-up prior to rowing and bad technique in throwing and lifting the boat.

Rowing Injuries sustained out of the boat (N = 22)

<table>
<thead>
<tr>
<th>Activity</th>
<th>Male</th>
<th>Female</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Running</td>
<td>2</td>
<td>5</td>
<td>32%</td>
</tr>
<tr>
<td>Weight training</td>
<td>5</td>
<td>1</td>
<td>27%</td>
</tr>
<tr>
<td>Lifting/Throwing boat</td>
<td>4</td>
<td>1</td>
<td>23%</td>
</tr>
<tr>
<td>Warming up/stretching</td>
<td>2</td>
<td>2</td>
<td>18%</td>
</tr>
</tbody>
</table>

We feel that injuries in the last two categories are entirely unnecessary and could be substantially reduced by using progressive warming-up schedules with an emphasis on gentle stretching and avoiding sit-ups or bouncing movements. Warming-up should be continued for the first part of the outing in the boat. The correct techniques for lifting the boat in and out of the water should be taught and each club should ensure high standards are maintained. The cox of each boat plays an important role in ensuring that clear instructions are given and that all the crew are prepared for the lifts. The “throwing up” technique should only be used by experienced crews who should be aware of the dangers. All training techniques should also be carefully monitored by club officials to avoid such a high incidence of injury out of the boat.

Yours faithfully,

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Cambridge CB2 2OQ.

Letter to the Editors,

Dear Editors,

STRESS FRACTURE OF THE PATELLA

A 27-year-old man regularly jogged 30 miles per week. Whilst running he developed pain on the lateral aspect of his right knee without history of injury. Because of the pain he stopped jogging for three months. He sought advice and was treated with isometric quadriceps exercises. Two months later he was still unable to run more than one mile without symptoms. Skyline patellar views at that stage revealed a vertical patellar fracture with separation of the fragments (Fig. 1), without the smooth contours or oblique line of demarcation of a bipartite patella.

The fragment was excised at operation and subjected to histological examination (Fig. 2). This confirmed the clinical suspicion of a stress fracture, with vascular proliferation in the underlying marrow, fibrocartilage and spicules of dead bone. The patient made a full recovery and is now able to run his previous distances without pain.

Stress fractures of the patella are rare. The first case was reported in the Journal of Bone and Joint Surgery by Devas in 1960. A literary search revealed three further papers on patellar stress fractures: Kavan (1981), Dickason and Fox (1982), Iwaya and Takatori (1985). These three papers described cases that responded to conservative treatment with evidence of callus formation at three months.

This stress fracture failed to unite and required fragment excision. This supports the observations made by Devas who likened patellar stress fractures to stress fractures of the femoral neck in their tendency to displace and their requirement for operative treatment.

Skyline patellar views were essential in making the diagnosis in this case as the fracture was not clearly visible on the standard radiographs of the knee. Skyline patellar views should be used routinely in the assessment of patients presenting with anterior knee pain.

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Yours faithfully,

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References

Stress fracture of the patella.

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