

## CORRESPONDENCE

St. David's Hospital,  
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To the Editor:

Dear Sir,

### COLLAPSE DURING BASKETBALL "MARATHON"

We wish to report on a case of collapse amongst ten highly trained athletes during an attempt on the world record of 89 hours for continuous basketball playing (Rumley and Rafta, 1983). All the players had histories of long term physical activity and their weight ranged from 68 to 85 kilograms. The ten players were examined before the exercise and no histories of medications or recent illnesses were found. Blood pressure, pulse, temperature and any clinical symptoms or signs were recorded before and during the exercise. Five minutes each hour were allowed for drinking, eating and toilet purposes. Five of the athletes completed 90 hours of play.

After 66½ hours of continuous exercise, one of the players collapsed. He looked jaundiced, his lips were dry and his eyelids were oedematous and he showed the following changes from the start of the exercise to a few minutes after his collapse; his blood pressure rose from 120/80 to 160/92 mm Hg, his temperature rose from 36.5°C to 37.5°C, his bilirubin rose from 28 to 68 µmol/L and his potassium rose from 4.0 to 7.5 nmol/L. There was no evidence of haemolysis to account for the rise in bilirubin and haptoglobin did not change but we could not explain the rise in potassium. The finding of hyperkalaemia after

collapse due to strenuous exercise is consistent with a report by Ledingham et al, 1982 in which a marathon runner collapsed with a potassium of 7.5 nmol/L. However, Maughan et al (1982) and Stansbie et al (1982) did not encounter any such cases of hyperkalaemia.

Collapse after strenuous exercise is usually related to dehydration and resultant hypovolaemic syncope, compounded by fatigue (Tunstall-Pedoe, 1983) but this player showed no hypovolaemia or dehydration. With the boom in marathons and prolonged physical exertion, it can be expected that more sport-induced injuries might be encountered in future.

Yours faithfully,

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ALAN RUMLEY, BSc, MSC†

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## Collapse during basketball "marathon".

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