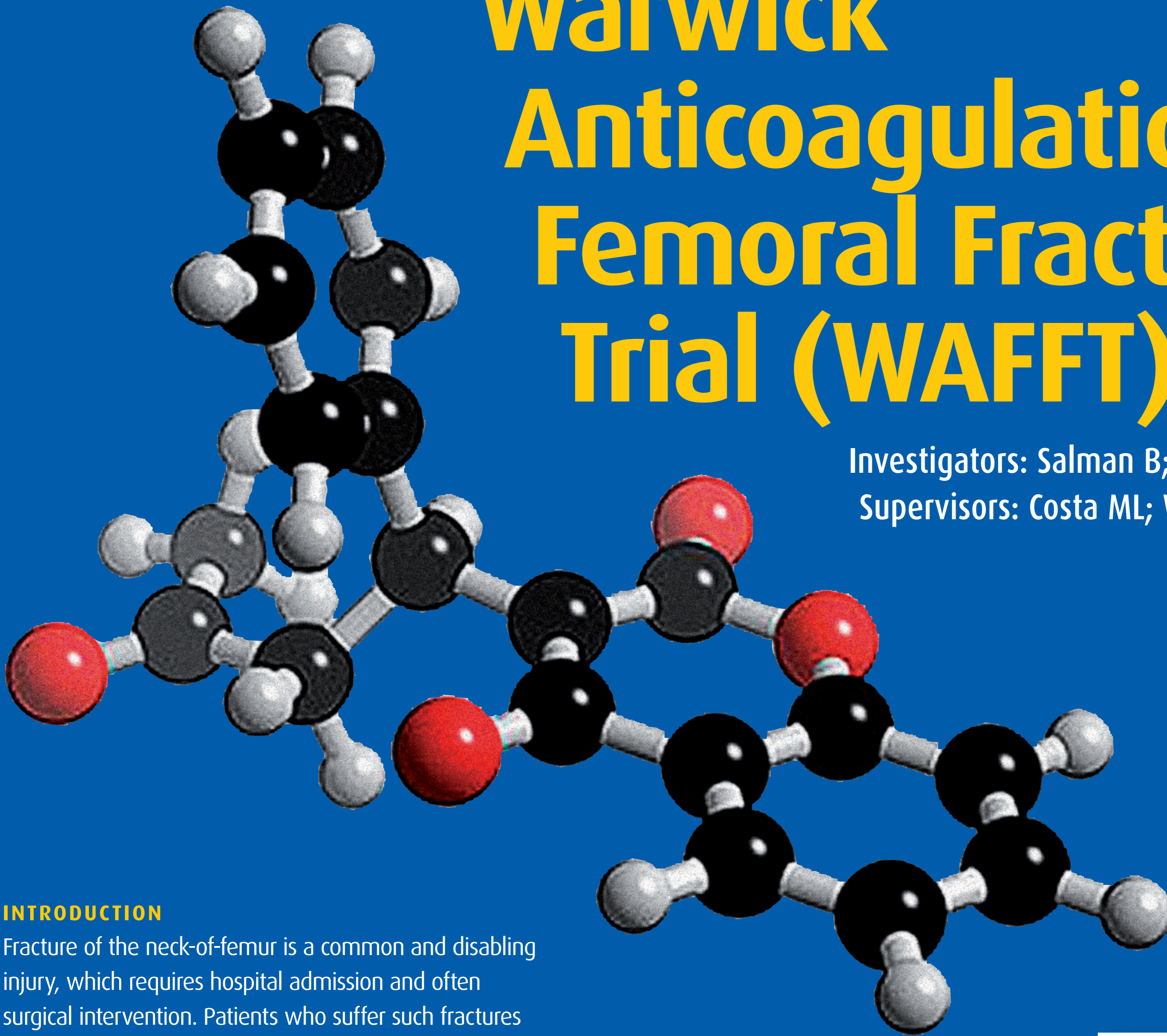


Warwick Anticoagulation in Femoral Fracture Trial (WAFFT)

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“Through our involvement with URSS we have been able to explore new areas of research”

Fig 1 3D model of Warfarin structure.

INTRODUCTION

Fracture of the neck-of-femur is a common and disabling injury, which requires hospital admission and often surgical intervention. Patients who suffer such fractures often also have co-morbidities that require them to take anticoagulant therapy in the form of warfarin. Although warfarin does have medical benefits, it can have a negative impact on potential surgical intervention; delaying the surgery and increasing the risk of bleeding etc. We performed a six-year audit of all of the patients admitted to the University Hospital Coventry and Warwickshire with a fracture of the neck of femur. We reviewed the medical records of all of the patients taking warfarin to determine how this affected their treatment and recovery.

METHOD

Patients who suffered a fracture of the neck-of-femur between 2000 and 2006, were identified from the hospital theatre records. These records were cross-referenced with the haematology results during the same period to identify all patients who had been investigated for anticoagulation. We then reviewed all of these patients' notes and extracted information regarding their delay-to-surgery etc. using a pre-constructed proforma.

RESULTS

Our search revealed 2362 patients who had sustained a fracture of the neck-of-femur within this period, of whom 137 were taking warfarin. Only 12 patients

“The URSS scheme has provided a great way of developing many transferable skills for our future careers”

“I feel privileged to have been involved with this new and important area of research”

had been given 'vitamin K' to reverse the anticoagulation effect of the warfarin. Those patients who had not had the effects of their warfarin reversed waited, on average, 2.4 days longer for their operation and 16.8 days longer to be discharged. None of the patients given vitamin K suffered a medical or operative complication. 22 of the other patients died in the peri-operative period.

CONCLUSION

Our findings would suggest that the administration of vitamin K to patients with a fracture of the neck-of-femur who are taking warfarin, may reduce the delay to surgery and possibly improve the patients' outcome, without any serious side-effects.

FURTHER STUDY

Our investigation has now paved the way for a Randomised Clinical Trial to be conducted, to assess the potential benefits of the use of vitamin K for those patients sustaining a fracture to their neck-of-femur who are taking warfarin.

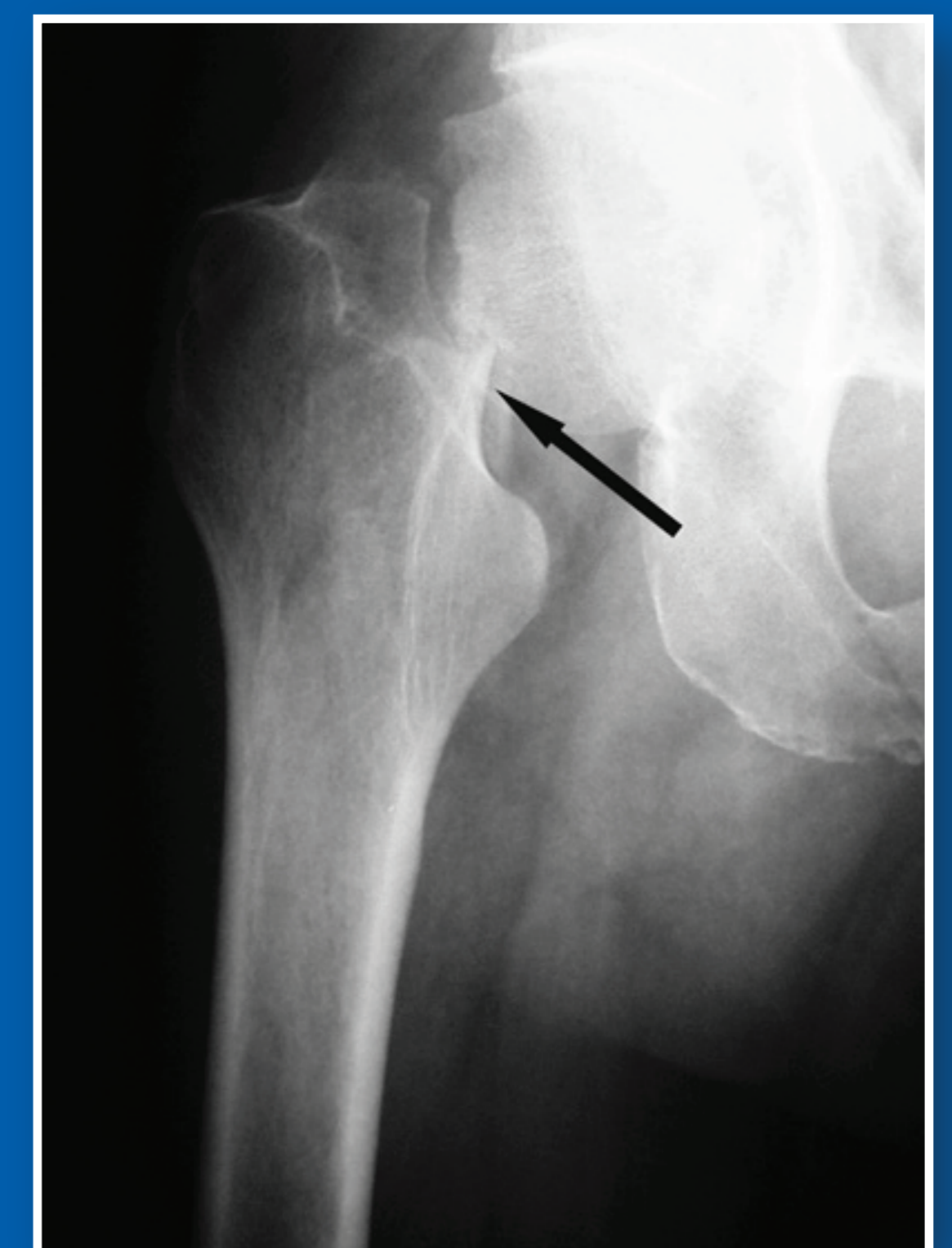


Fig 2 Anteroposterior (AP) radiograph demonstrating a fracture of the right hip.

“This project allowed us to expand our knowledge of medicine as well as develop our skills in research and design”

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