

# The CENTRAL AFRICAN JOURNAL OF MEDICINE

Dr. DAVID LIVINGSTONE

Vol. 3. No. 3

MAY, 1957

## CONTENTS

### ORIGINAL ARTICLES

Ephelactics in General Practice	<i>R. W. Fynn</i>	163
Male Infertility	<i>Dorrien Venn</i>	171
Intravenous Fluid Technique	<i>M. A. Kibel</i>	180
Fractures of Radial Head with Medial Displacement	<i>E. J. Nangle</i>	185
Dermatitis Gangrenosa Infantum	<i>M. Gelfand</i>	187
Fevers of Africa 6.— Leishmaniasis South of Sahara	<i>P. E. C. Manson-Bahr</i>	189
B.M.A. (Mashonaland) Evidence on Medical School		194

### EDITORIALS

Epidemiology of Tuberculosis in the Belgian Congo and the Ruanda Urundi	199
Medical School Planning Committee	200
City of Salisbury Medical Report, 1955-56	201
B.C.G. Campaign in Eastern Districts	201
Twenty-one Years as M.O.H. to Salisbury	201
Dr. C. K. Joshi, M.B.E.	202
Salisbury Clinical Club	203
Obituary, L. E. W. Bevan, M.R.C.V.S.	204
Final Appeal for Prof. Drennan	
Presentation Fund	206
Correspondence	207
In Rhodesia Then	208
Book Reviews	209
The Journal Library	210
In the Federal Assembly	211
Latest Pharmaceutical Preparations	213

PUBLISHED MONTHLY, ANNUAL SUBSCRIPTION £2 2s. 0d.

Registered at the General Post Office as a Newspaper.

## Fractures of the Head of the Radius with Medial Displacement

BY

E. J. NANGLE, F.R.C.S.

Consulting Orthopaedic Surgeon, General Hospital,  
Salisbury.

It is now well recognised that fractures of the head of the radius are not trivial injuries, but are due to the elbow joint being subjected to a considerable degree of violence. The injury usually occurs when the patient falls on to the outstretched hand and the head of the radius is driven violently against the capitellum, which acts rather like a blunt chisel and either impacts the radial head or else splinters off a portion of it. The capitellum itself often suffers a considerable degree of damage to its articular cartilage, although this does not usually show on routine X-rays. Unless the crack in the head of the radius is of a very trivial nature, operation should be advised in order to excise the radial head. This should not be delayed for more than a few days, and I have found that the best results are obtained if the operation can be performed within a few hours of the injury. Attempts have been made to replace the radial head with plastic or metal inserts, but I do not consider that this procedure is advisable and that experimental surgery of this nature should be left to large clinics, where the problem can be properly evaluated.



Fig. 1—*Case I*: Lateral X-ray taken of the left elbow six weeks after injury shows what appears to be a straightforward fracture of the head of the radius, with anterior displacement of the radial head.

The object of this paper is to call attention to an unusual type of fracture of the head of the radius, in which the radius is displaced to the medial side of the joint, and there is also an associated ulnar nerve lesion.

Two cases have been seen with this unusual type of injury.



Fig. 2—*Case I*: Antero-posterior X-ray of the left elbow joint shows the fracture of the radial head with the shaft of the radius lying on the medial side of the ulnar. This unusual displacement may be overlooked and should be kept in mind, especially in the presence of an ulnar nerve lesion.

*Case I*.—A girl of 15 years of age fell on to her outstretched hand and developed a dislocation of the left elbow joint. The dislocation was reduced shortly afterwards without an anaesthetic and the arm supported with a sling. The girl continued to complain of pain and limitation of movement and she was referred to me six weeks after the injury, as an X-ray had been taken and it was noted that she had a fracture of the head of the radius (Figs. 1 and 2). On examination her elbow joint was still very

swollen and there was a complete lesion of the ulnar nerve. X-rays of the elbow joint showed a remarkable state of affairs in which the head and shaft of the radius had been displaced medially. An operation was performed and the elbow joint was opened on the lateral side. Considerable difficulty was experienced in getting into the joint, but it was eventually possible to pull the shaft of the radius over to the lateral side and to extract the head. The final result has not been satisfactory, and when the patient was seen two years later it was noted that she had only a trace of pronation and supination and that her elbow extension lacked 35 degrees of movement. The nerve lesion recovered without operation.

*Case II.*—A boy aged ten years fell out of a tree and was seen within a few hours of the injury. He had injured his left elbow, and X-rays showed that he had a crack across the neck of the radius and that the shaft of the bone was displaced medially. He complained of pins and needles in the distribution of his ulnar nerve in the fourth and fifth fingers and there was a blunting of sensation to pinprick. It was possible to reduce the fracture dislocation satisfactorily without having to open the elbow joint, and the ulnar nerve lesion recovered rapidly. Six months later his elbow joint had returned to normal and he had no disability.

#### DISCUSSION

A similar case has been recorded by Sir Reginald Watson-Jones (1943), who was consulted by a patient who had a medial scar of his elbow joint through which he claimed the head of his radius had been removed. He was in fact able to produce the head of the radius which he had kept as a souvenir.

It would appear that the mechanism of injury in these cases is that the elbow joint suffers a severe posterior dislocation and that the head of the radius is deflected off the capitellum to the medial side of the joint. In the case of the boy of ten there was only a mild crack in the radial head and no surgery was required. It is, however, important to appreciate the fact that the shaft of the radius has been displaced medially, as unless the X-rays are inspected carefully one may fail to realise this and accept the case as a simple crack fracture. The presence of an ulnar nerve lesion should arouse one's suspicion, as this implies that the nerve has been subjected to a traction injury which occurred when the joint was dislocated. In the second case the boy came to hospital without a dislocation, but I consider that a dislocation must have occurred and been reduced spontaneously.

#### REFERENCE

WATSON-JONES, R. (1943). Fractures and joint injuries. E. & S. Livingstone, Vol. II, p. 508.



This work is licensed under a  
Creative Commons  
Attribution – NonCommercial - NoDerivs 3.0 License.

To view a copy of the license please see:  
<http://creativecommons.org/licenses/by-nc-nd/3.0/>

This is a download from the BLDS Digital Library on OpenDocs  
<http://opendocs.ids.ac.uk/opendocs/>