INTRODUCTION AND AIM OF THE WORK

The subject of traumatic carpal instability has begun to occupy a reasonable part in the recent literature although it was usually ignored in the past.

The main problem of this subject is how to diagnose such lesions because the diagnosis of traumatic carpal instability is usually delayed and more commonly diagnosed as a "sprain of the wrist". The early diagnosis of traumatic carpal instability is essential for the successful treatment.

The aim of this work is to present an up-to-date and "hopefully" a comprehensive review of the pertinent literature covering this subject including a revision of the anatomy and biomechanics of the wrist; classification, pathomechanics, clinical picture and complications of traumatic carpal instabilities; with a great attention and stress on the methodic approach on wrist examination, various methods of investigations that lead to proper and early diagnosis of those lesions and recent methods of treatment.

ANATOMY OF THE CARPUS

The carpus is a pliable osteoligamentous complex interposed between the skeleton of the forearm and that of the digital rays (Fahrer, 1981).

I- BONES OF THE CARPUS

Carpal bones are eight (Figs 1-1 & 2-1). They lie in two rows, a proximal and a distal. The proximal row consists of the scaphoid, the lunate, the triquetrum, and the pisiform. The distal row includes the trapezium, the trapezoid, the capitate, and the hamate. Together, the eight bones present a proximal condyle for the distal surface of the radius and the triangular fibrocartilage, a distal series of irrigular articular surfaces for the metacarplas, and on the sides, non-articular surfaces related to the collateral ligaments of the radiocarpal joint.

The anterior (palmar) surface of the carpus presents a longitudinal concavity, accentuated by the tubercles of the scaphoid and trapezium laterally and the pisiform and hook of the hamate medially. The dorsal surface of the carpus shows an irrigular convexity (Fahrer, 1981).