

## INTRODUCTION

### Archaeological discoveries:

Osteoarthritis is an age-old affection of mankind. Pathological changes characteristic of degenerative joint disease have been observed in skeletons of prehistoric dinosaurs of over 200,000,000 years old [Boyd and Hollander, 1961]. Probably the oldest known human case is that of the Neanderthal man about 40,000 years B.C., who had characteristic changes in the spine [Pales, 1930].

Ruffer found specimens in the tombs of Ancient Egyptians, including examples of osteoarthrosis of several joints in skeletons 600 years old [Illingworth and Dick, 1968].

Fischer (1924) also discovered osteoarthritic changes in the Egyptian mummies.

Evidence of the disease is present in bones discovered in Nubian caves dating back to 10,000 B.C. [Boyd, 1961].

Hooton (1930) found definite degenerative joint disease in the prehistoric American Indian remains [Hollander, 1960].

Despite the fact that degenerative joint disease has been prevalent throughout the ages, clinical

recognition of osteoarthritis dates from the middle of the nineteenth century [Collins, 1949 and Hollander, 1960].

Knee osteoarthritis:

In the present history osteoarthritis of the knee joint represents a common problem in Egyptian population, particularly primary knee osteoarthritis which is the commonest type of arthritis seen in this country.

As the disease is known to be a degenerative changes affecting primarily the articular cartilage. So we insisted to stress on physiology and biomechanical activities of normal articular cartilage in the beginning of this work.

The knee joint has unique morphological and physiological features associated with the human orthrostatic posture. Disturbances in the mechanics of the knee joint associated with the presence of primary condition or due to bad positioning will lead to osteoarthritis. For these reasons mechanics of the knee joint was briefly studied in this work.

Our study is aiming to clarify several points about the role of weight, special habits and the presence of primary condition in causation of osteoarthritis of the knee, with particular stress on regional classification of knee osteoarthritis and its relation to the etiology of this common condition.