

Dupuytren's disease in Saudi Arabia

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In a prospective study, 600 consecutive adult Saudi patients were examined for clinical evidence of Dupuytren's disease. Dupuytren's disease was found in two of the 600 patients (0.003%). Both patients were native Saudi. Predisposing factors and clinical findings were reported for both cases. It was concluded that Dupuytren's disease is extremely rare among Saudi Arabians.

Key words: *Dupuytren's disease; Saudi Arabia*

Maladie de Dupuytren en Arabie Saoudite

RÉSUMÉ : Dans le cadre d'une étude prospective, 600 adultes consécutifs saoudiens ont été examinés à la recherche de signes cliniques de la maladie de Dupuytren. La maladie n'a été décelée que chez deux patients (0,003 %) et les deux étaient d'origine saoudienne. On a fait état de facteurs de prédisposition et de signes cliniques dans les deux cas. Les chercheurs en sont arrivés à la conclusion que la maladie de Dupuytren est extrêmement rare chez les Soudiens.

Dupuytren's disease (DD) mainly affects the palmar fascia of the palm and fingers. However, it may also affect the dorsum of the digits (knuckle pads), the plantar fascia of the foot (Ledderhose's disease) or the dorsum of the penis (Peyronie's disease). It is believed to be a familial disease that is transmitted by a single gene, and its prevalence is increased in patients with diabetes mellitus, epilepsy or alcoholism. Furthermore, it may be precipitated by injuries to the hand (1). DD is extremely rare in the Middle East, and no reports of DD among patients of Saudi Arabian origin have been found – hence the reason for the present study.

PATIENTS AND METHODS

In a prospective study, 600 consecutive adult Saudi patients who presented to the author's hand surgery practice were examined for clinical evidence of DD. The prevalence and distribution of DD were determined against age, sex, racial background and predisposing factors. Surgical findings and recurrence of DD were also studied.



Figure 1) Dupuytren's disease in the left hand of the first Saudi patient who had a history of alcohol ingestion



Figure 2) Dupuytren's disease in the left hand of the second Saudi patient who sustained an injury to the same hand one year before he presented with the disease

RESULTS

DD was found in two of the 600 (0.003%) adult Saudi patients. Both patients were native Saudi from Najd (Central Saudi Arabia). The first patient was a 48-year-old man who presented with DD of the left hand involving the little and ring fingers (Figure 1). The only predisposing factor for DD was a positive history of ingesting alcohol. He underwent palmar fasciectomy (both fingers had central cords), and the diagnosis was confirmed histologically. Three years after

surgery, there was no evidence of recurrence in the left hand, but early DD was evident in the ulnar, contralateral aspect of the right hand.

The second patient, a 43-year-old man, presented with DD of the left hand involving the middle finger (Figure 2). One year before presenting at the clinic, the same hand had been injured while using a saw and the little finger was amputated. Progressive contracture of the middle finger was observed six months after injury. He underwent palmar fasciectomy, and the diagnosis of DD was confirmed histologically. There was no evidence of recurrence at the two-year follow-up.

DISCUSSION

DD is common among white people and is particularly prevalent in Scotland. This is acknowledged in the Scottish legendary 'Curse of the MacCrimmons'. The MacCrimmons family ran the college of bag piping from the 15th to the 18th century.

DD prevented the affected individuals from playing the bag pipes later in life (2). Lennox et al (3) studied 200 geriatric patients in Aberdeen hospitals and observed DD in 21% of women and 39% of men examined. In contrast, DD is rarely seen in blacks (4), Chinese (5), Indians (6) and Saudi Arabians, as shown in the present study.

Although DD is rare in non-white races, its predisposing factors and clinical presentation are similar to those seen in white populations. Finally, it is interesting that most cases reported in non-white people have been in men.

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