BILATERAL DUPUYTREN'S CONTRACTURE IN A BLACK PATIENT

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SUMMARY The first case of Dupuytren's contracture in a black patient with no obvious caucasian admixture was reported in 1979. This condition is rare in the purely black population and since 1979 only 23 cases have been reported. We present the case of a black man with no history of caucasian admixture with bilateral Dupuytren's contracture. We suggest that this condition may not be as rare as the literature suggests and, that canvassing other hand societies for their experience, particularly in the continent of Africa, may help to establish the true incidence of this condition.
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Dupuytren's contracture is a fibroproliferative disorder of unknown aetiology. Felix Plater first described it in 1614, followed by Sir Astley Cooper in 1822. In 1836 it was presented and described by Baron Guillaume Dupuytren, from whom the name is taken.

There is general agreement that this condition has a genetic predisposition that mainly occurs in white men of Northern European ancestry. The genetic pool has been traced back to Scandinavian origin.[1] There are some epidemiological associations, such as with diabetes and epilepsy, but generally the cause is unknown. It appears rarely in the purely black population.

A thorough review of the literature found one review paper from 1994,[1] several case reports over the past 20 years and two letters from 1979.[2,3] A total of 23 cases have been documented in the literature. Otherwise there is very little on the subject.

There is always the concern that there may be some admixture of race in some black patients with the condition but the letter from Furnas in 1979[3] suggests that Dupuytren's contracture can occur in a purely black population. Mennen's work from 1986 supports this.[4]

We present the case of a black man with no history of interracial admixture who has bilateral Dupuytren's contracture. One hand was surgically treated 12 years ago; the other hand now requires surgical treatment.

CASE REPORT

The patient is a 79-year-old man who emigrated from Jamaica in 1965. He is relatively fit and well and has worked his entire life in the UK as a coal miner. Bilateral Dupuytren's contracture was diagnosed in 1988, although at that stage only his right hand was considered to be severe enough to require surgery. This was performed successfully and he has not had any recurrence to date (Figure 1). It was noted at the time that he had some Dupuytren's tissue in his left hand but this was not severe enough to warrant surgery. He has been reviewed several times since 1988 and at each visit it was noted that the contracture in his left hand had not progressed and did not require surgery. He was reviewed in 1994 with respect to this. We saw him again in June 2000 and the Dupuytren's in his left hand was by now interfering with his day-to-day activities (Figure 2). He has now been offered surgery.

The patient can trace his family back with certainty to his grandparents, who also came from Jamaica. There has been no admixture with respect to the last two generations. He is aware that his grandparents' ancestors were originally from Africa but is unsure of the region.

The patient has seven brothers, two sisters, four sons and two daughters. There is no history of Dupuytren's contracture in any of them. There is also no history of Dupuytren's in any of his extended family that he is aware of.

He has no relevant past medical history of note and no

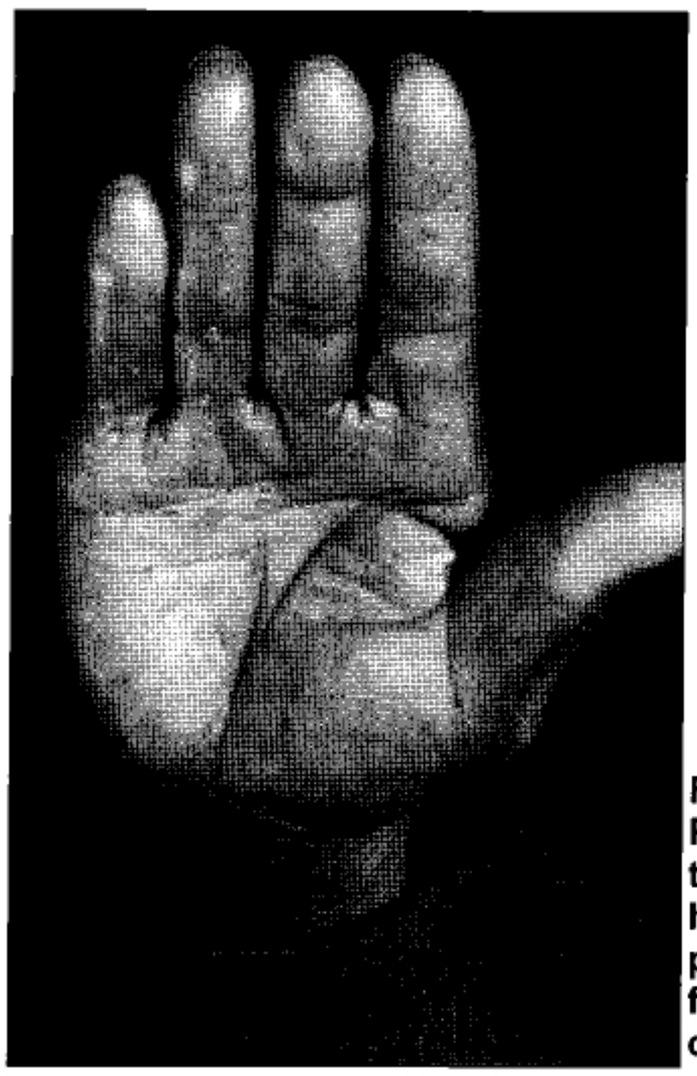

Figure 1. Palmar aspect of the patient's right hand after previous surgery for Dupuytren's contracture

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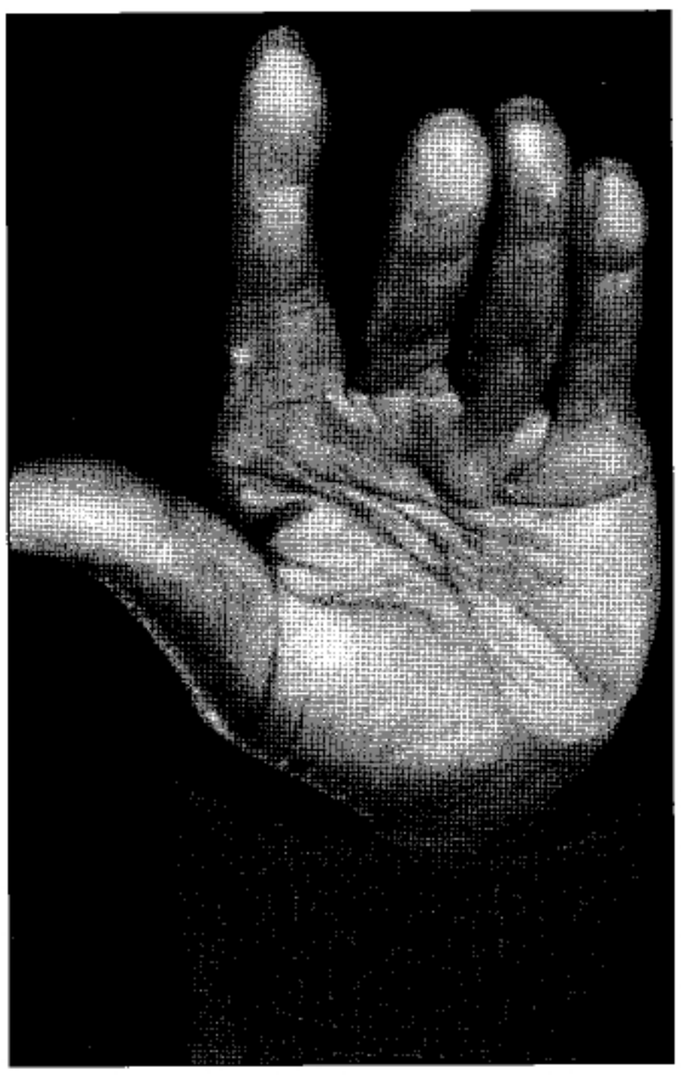

Figure 2. Palmar aspect of the patient's left hand while awaiting surgery for Dupuytren's contracture

history of diabetes or epilepsy. He has had no trauma to either hand.

DISCUSSION

Dupuytren's contracture in a black patient was first described in 1979.[5] This is a very rare condition in the purely black population and there is always the possibility that there may have been some interracial admixture which was unknown to the patient. A letter from Furnass in 1979[3] described a case of a Tanzanian tribesman with the condition. He lived in a remote area and the only caucasians were the staff of the Lutheran Mission, who were not present at his birth. This provides strong circumstantial evidence of the condition occurring in the purely black population. In 1986, Mennen,[4] in a series of six black cases, established through genotyping that the disease could occur in the purely black population. Our patient can accurately trace his family lineage back two generations to the time of slavery and is not aware of any interracial admixture.

Epidemiological factors present in the caucasian population that are related to the development of the condition appear to be of equal importance in the black population. That is to say, no overwhelming factor is particularly relevant in the black population. Our patient was a manual labourer all his working life, although he did not sustain any injury to either hand. This is in keeping with the 1994 review where 60% of the cases were manual labourers, although this is not considered a risk factor.

Our patient has the condition bilaterally – five of the eight cases reported in the 1994 review were bilateral.[1] Our patient has no family history of Dupuytren's contracture and no other risk factors for the condition.

We wonder if the rarity of Dupuytren's in the black population is genuine or due to under-reporting. As a way to assess more accurately the incidence of this condition, we propose to canvass the members of hand societies in other countries, particularly Africa, to establish the true incidence.

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