CUTIS VERTICIS GYRATA

(A clinical case report of primary variety) by

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INTRODUCTION

The term cutis vertices gyrata was first coined by Unnain 1907. Pillsbury, shelly and Kligman (1956) described it as a rare cuntaneous change in which the scalp is thrown into folds reminiscent of cerebral convolutions. It may involve the entire scalp or deep furrowing may occur only on the crown or sub-occipital region. The disorder has mostly been seen in men with black hair. Recently we came across a case of cutis verticis gyrata in a Sikh soldier which is being reported as a dermatological oddity of great clinical interest.

CASE REPORT

MS a Sikh male of 22 years was admitted in military hospital Simla with complaing of thickening of scalp with furrowing and infolding of skin. He noticed this abnormality incidentally while combing his hair about two years before admission. In the begining he took no notice of this but due to gradual increase in number as well as depth of folds he felt concerned and reported to the hospital. He also felt some sort of heaviness over his head for about two months prior to admission. He denied any past history of trauma or infection over scalp. Patient is unmarried and there was nothing relevant in his family history.

On examination he was a young man of average built and nourishment. Local examinrtion revealed marked thickening, folding and furrowing of the skin over vertex. These folds were running antero-posteriorly as is evident from the clinical photograph and resembled gyri and sulci seen on cerebral cortex. Convolutions were most marked in the central portion becoming less distinct perepheraliy. Regional lymph nodes were not palpable.

Systemic examination revealed no evidence of acromegaly, myxoedema or arthropathy. Thyroid was not enlarged. A provisional diagnosis of cutis verticis gyrata was made and investigations were under taken to exclude any local or systemic cause.

INVESTIGATIONS

(a) Hb 15.5 Gm%, total and differentia' count within normal limits. Ers-2mm fall 1st hour (wintrobe)

(b) Oral GIT and prednisolone provoked GIT showed no evidence of clinical or latent diabetes.

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(c) Blood Cholesterol–190 mgm%

(d) Protein bound iodine 4.5 mgm%

(e) Urniary 17 keto steriods–10.6 mgm/24 hrs.

(f) X-ray chest PA–NAD

(g) X-ray skull AP, lat.: pituiary fossa normal, no change in bony vault

(h) X-ray hands and feet no change in small bones.

Having excluded known causes associated with this disorder a diagnosis of primary variety of cutis vertics gyrata was made.

REVIEW OF LITERATURE

Jaddasohn is accredited with the first case report which he presented at the 9th German dermatological conference (Alderson HE). Wise and Levin (1918) reported the first example of this curious anomaly from America. Polan etal (1953) published an exhautive review of 238 cases reported in literature till then suggesting thereby the rarity of this disorder. This condition may not produce any symptoms and the area being coverd with hair may remain unnoticed and inconspicuous. Oliver (1922) demonstrated a case where the patient was not aware of its existence. Brauwer etal (1953) showed the value of X-ray in diagnosis of such cases especially in primary naevoid variety where one may see radiological evidence of underlying bony changes. Hass (1952) had mentioned roentgenographic method of demonstrating cutis verticis gyrata for the first time and he emphasised that X-ray examination of the scalp is by far the simplest and most accurate means of detecting and diagnosing this disorder. Alderson HE (1932) studied the histological changes. He showed that apart from acanthosis and accentuation of various layers of skin, there was marked increase in fibrous tissue in the lower corium.

DISCUSSION

Aetiologically speaking the condition may be primary or secondary. In primary variety, which accounts for bout 45% of the cases, no cause is found and the condition is thought to be a naevus of late development (Marshal–1960).

Secondary variety may follow trauma or infection of scalp. Alderson HE (1952) reported two cases following trauma and ch. folliculitis of scalp. Recently Marquis and Mehta (1966) reported a similar case following ch. follicultitis scalp from Bombay. Shroff has also reported two such cases. Condition may be secondary to local tumours like neurofibroma, turban tumour a cylindroma. It may be associated with bronchogenic carcinoma or endocrine disorders like acromegaly, mayxoedema, cretinism. Other conditions known to be associated with cutis verticis gyrata are tuberose sclerosis, hypertrophied osteoarthropathy, Ehlers Danlos syndrome and pachydermal periostosis.

In the present case reported above since no other abnormality was found it was thought to be of a naevoid primary. Although the duration of complaint is about two years, it is likely that it could have been present for a longer time, the patient unaware

of its existence as was also demonstrated by Oliver (1922) in his case. We could not find any roentgenographic changes in the bones of skull as suggested by Brauwer etal and Hass. Biopsy was not undertaken since the histological changes are non specific and of no diagnostic help. It is not known why this condition is more common in males with black hair. Commonly the ridges and furrows are transverse but in this case the uncommon feature is that these were present antero-posterioly. There is no known treatment for this disorder of primary variety though Alderson HE (1932) reported a case in which complete removal of involved area followed by skin grafting produced excellent results. In this case this line of treatment was not entertained owing to extensive nature of lesion.

SUMMARY

A case of cutis verticis gyrata of primary variety is reported. Relevant literature on the subject has been reviewed and discussed.

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Photo graph (See Photo Section).