

CHONDROCALCINOSIS AURICULAE WITH CHONDRODERMATITIS NODULARIS HELICIS

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Chondrodermatitis nodularis heliсis is reported first by Winkler (1916). Later, Forster (1918) and Dubreulh (1928) describe it as «painful nodules», Carolvon Haren (1941) names it «clavus heliсis», whereas Momgaberra (1956) characterizes it as dermatochondritis heliсis (B. Ganchev).

Predisposition factors are traumas and traumatic disorders (4, 6, 9, 12). The tightening of ears and heads with hats, kerchieves and shawls (specially nuns), as well as getting frozen, are all quite often reasons for this pathology. It is oftener with males (70%) than with females. Anatomy features, longer hairs, rarer possible traumas with women explain the established fact (14).

Pathoanatomic changes (7, 12) are mainly hyperkeratotic with rare parakeratosis in those nodules tending to ulcerosa. Oedema with fibrinous collagenic necrosis surrounding the vessels is established in the derma. Sometimes a lymphocyte infiltration is registered. The cartilage is either totally intact or possesses certain small areas with amorphous rose matter.

The disease is accompanied by an ache which is stronger during sleep, under pressure or in cold weather. The lenticular nodules located on the aural edges are oftently ulcerated and small ulcers appear out (3, 9, 12). Rare location of the nodules (sometimes multiple) antihelical, tragusal (3, 13) and antitragusal. The right ear is oftener affected. The pathological disorders are active up to 2 months and after that they are stationary (3).

The diagnosis is not complicated; it is based on the clinical symptoms and typical location. Epithelioma basocellularae and boxer's posttraumatical professional disorders are the only differential-diagnostic problems. The former has a typical histology whereas the latter has more diffusive development.

We demonstrate one patient with clinically manifested chondrodermatitis nodularis heliсis accompanied by ulcerosis (pseudoeplitheliomatose) and calcinosis disorders in the aural shell (X-rays diagnosis); no similar reports in the available literature can be found.

The patient: S. T. D., age 76, is a pensioner. In his youth he gets frozen and has aural aches and itches. He reports no traumatic or actinic disorders. Since last few years he has the «same nodules» on his aural edges, being painful when lain on bed. 5 months ago one of these nodules (right ear) is ulcerated and a «fluid» comes out; later a crust is formed. Profession: long-term agricultural worker. Other diseases in the past: rheumatism, bronchopneumonia. Family anamnesis: unburden. Laboratory data: Hb — 15,6 g %; Leuco — 6200; sedimentation test — 45 mm; blood sugar, cholesterin, transaminase, ionogramma and urine — normal. Xerography — calcinosis auriculae.

Histological study: r. No. 7433/23rd October, 1978, dr. Bogdanov: Acanthosis with expressed hyperkeratosis and slight parakeratosis. Under epithelium is established lymphoid infiltration — in one ear only.

Clinical examination: 3—4 nodules (lentils-size), colour of normal skin, located on aural edges. An ulcer is established on the right aural shell (peas-size), covered with yellowish crust and performing a weak exudation under it.

Discussion

The clinical diagnosis of chondrodermatitis nodularis helcis was not a problem; the disease had clear symptoms. The ulcerated right ear was a suspected pseudoepitheliomatose which required a histological investigation to prove the preliminary diagnosis. The X-rays detected calcinosis was quite interesting; we presume it is a circumscriptive calcinosis.

According to Peter and Lever (after Duperrat) the calcinosis can occur in the derma, hypoderma, muscles, inner organs (rarer). The located calcinosis is a probable result of a systemic sclerodermia, dermatomyositis or idiopathic disorders (Duperrat). According to McKusick aural calcificates are detected with Morbus Adisoni, ochronose, diabetes, systematic chondromatose and family-originated cold supersensitiveness. Nathanson establishes them with acromegalia, whereas F. M. Scherer — with hyperthyreoidism. We register such calcificates in wrestler's ear shells (2): they are located near the aural canal, in the middle of the shells. Other calcificates are found near the aural edge: another our patient with protoporfiria erythropoietica accompanied by aural calcinosis.

It is obvious that cases with aural calcificates become oftener. However, their mechanism and intimate development are still unrevealed. It is possible that microtraumas and other alternative disorders can be predispositionary, but this is an opinion which needs proved facts.

In conclusion the authors analyse the bibliographically reported cases with aural calcinosis; presuming their patient with calcinosis and chondrodermatitis nodularis helcis to be the only one reported until now they recommend X-rays investigations when aural lesions are established.

REFERENCES

1. Ганчев, Б. Дермато-венерологична терминология. С., Мед. и физк., 1968. —
2. Григорова, Т., Хр. Попмихайлова. *Дермат. и венер.*, 3, 1973, 195—197. —
3. Barker, L. P. et al. *Arch. Dermat.*, 81, 1960, 81, 15. —
4. Cohen, E. L. Modern trends in Dermatology, Series 3, Macken. RMB, London, 1966. —
5. Duperrat, B. *Precis de Dermat.*, 1959, 873. —
6. Elste, G. *Dermat. Wschr.*, 151, 1965, 337. —
7. McCounell, E. M. *S. Clin. Path.*, 10, 1957, 46. —
8. Nathausen, L., S. Losner. *Radiology*, 48, 1947, 6. —
9. Newcomer, V. D. et al. *Arch. Dermatol. Syph.*, 68, 1953, 241. —
10. Peter et Lever (after Duperrat). —
11. Scherrer, F. W. *Ann. Otorhinolar.*, 41, 1932, 867. —
12. Shuman, R. *Heh-vig Am. S. Path.*, 3, 1954, 24, 107. —
13. Vaffice, H. S. *Arch. Dermatol.*, 1, 1963, 87, 735. —
14. Wilkinson, F., J. Ebling. *Textbook of Dermatology*, 11, 1973, 1636—1638.

**ХОНДРОКАЛЬЦИНОЗИС АУРИКУЛЕ ПРИ ХОНДРОДЕРМАТИТИС
НОДУЛАРИС ХЕЛИЦИС**

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РЕЗЮМЕ

Описывается мужчина 76 лет, работающий в сельском хозяйстве, с частым отмороженным ушей, который уже несколько лет страдал Хондродерматитис нодуларис хелицис. При рентгенологическом исследовании (ксерографии) устанавливаются (впервые у нас) отложения кальция.

Авторы рекомендуют рентгенологическое исследование в качестве рутинного метода при исследовании больных Хондродерматитис нодуларис хелицис.