

THE DIVINE GRANULOMAS- A PATHOLOGIST'S VIEW ON CULTURAL PIERCING RELATED GRANULOMAS

Pathology

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ABSTRACT

Granulomas though commonly encountered entity by a pathologist, still surprises us by its varied presentation with each case. Here we are presenting an interesting case of cultural piercing related granulomas, during the occasion of Thaipoonsam in the state of Tamil Nadu diagnosed as sarcoidosis.

KEYWORDS

Granuloma, Sarcoidosis, Thaipoonsam, Foreign Body Reaction.

INTRODUCTION:

In India, Majorly in the southern states, piercings of metal spears and hooks, kavadi (wood steel bearings with idols) on the cheeks, tongue, chest or back by a group of dedicated devotees of Lord Muruga of Hindu mythology is a common ritual done during tamil month of Thai, on the day of poosam¹. This practice, in very rare cases leads to the occurrence of sarcoid granulomatous reaction developing at the sites of piercing after certain period of time.

CASE DETAILS:

A 26 year old young, healthy appearing male patient presented with multiple swellings, nodules over the face, back, chest, mucous areas of the mouth which were progressively enlarging, few being painful on different sites over a period of 3 months.

On thorough examination and history taking, he recalled history of piercing with metal spears through his cheeks, torso during "Thaipoonsam" a few months back.

He also gave a similar history in many others, who participated in the same ritual, though no one sought clinical attention.

The patient did not complain of pain, bleeding or pus formation during or after the ritual process. He also remembered applying of the holy ash (Vibudi) on to the spears and hooks and on his body before they were pierced. There was no history of loss of weight/ night sweats/ cough/ TB contact. There was no significant past surgical or medical history.

On examination there were 2x 2x1cm gray white firm nodules on both sides of his cheeks (Fig-1), multiple nodules on the chest and back (FIG-2), which were firm and few were tender on palpation.



Fig-1: Nodules seen on the cheeks



Fig-2: Nodules Of Varying Sizes Seen On The Back On The Site Of Piercing

An incisional biopsy of the nodule revealed multiple, naked, non-caseating granulomas with numerous foreign body type of giant cells with surrounding lymphocytes (Fig 3,4). All the histochemical stains

i.e. Ziehl Neelson for acid fast bacilli, Gomori-Methenamine Silver (GMS) stain for fungus were negative for Polarization did not yield any birefringence. A diagnosis of cutaneous sarcoidosis was made.

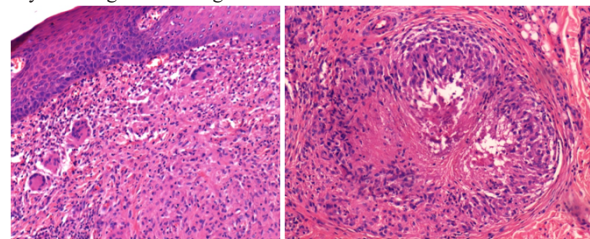


Fig-3: Skin With Dermis Showing Granulomas (H&E x100)

Fig-4: Dermis Showing A Naked Epithelioid Granulomas (H&E X200)

DISCUSSION

Kavadi and body piercing has been an age old tradition particularly in South India, Malaysia with holy ash application on the points of penetration, once they seem to achieve a trance state. Apart from pain, these patients usually present with infection, bleeding and scar formation in the areas of piercings. Here we have to notice that the patient came for a medical consultation within 3 months, But according to Ng Kh et al among the two patients who presented, one of them sought medical attention after 5 years, when the granulomas started to appear. This shows the varied time taken for presentation.

Granulomas are defined as chronic inflammatory reaction characterized by the focal accumulation of activated macrophages, often with an epithelioid appearance². As in our case, foreign material when injected into the skin can act as an inciting agent for the granulomatous reaction. It starts with an initial reaction of accumulation of neutrophils, later the polymorphous cells are eaten by the macrophages which engulf the cells, if the reaction is long standing. The reaction is also accompanied by lymphocytes, eosinophils and plasma cells.³ Granulomas can be sarcoidal, tuberculoid, necrobiotic, suppurative, foreign body, xanthogranulomatous and miscellaneous types.

Similar case reports from Malaysia showed sarcoid like reaction due to foreign body material which can be exogenous such as holy ash (mixture of cow dung, talc, if adulterated), tattoos, or endogenous keratin, eliciting a delayed hypersensitivity reaction within months to years⁴. Our patient was treated with topical steroids the first time he visited, and when he came for review he was given intralesional triamcinolone acetate.⁶ The further follow up was lost. This case study of a young gentleman presenting with such unusual picture of sarcoidosis was of great interest and similar cases reported across other parts of Asia, incites further research in cultural piercing related granulomas.

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