CASE REPORT OF A RARE TYPE OF APOCRINE GLAND, TUMOUR OF GROIN

*SUNDARAMURTHY, M. †PRASAD, K. N. †SATHYANARAYANAN, A. M. ‡JAGADISAN, D.

Introduction

These rare epidermal tumours arise from primitive epithelial germ cells (embryonal cells) which attain Apocrine – sweat differentiation. So they are organic Hamartomas of the epidermis. (Ref: Classification of epidermal tumours).

These tumours are usually benign but in rare cases malignant changes have been recorded in the form of (a) invasion of deeper structures, (b) ulceration, and (c) metastases.

The lesion causes no complaints except for the unsightly appearances.

In the history there are other cases in the family, chiefly in the females.

These tumours can easily be treated by complete excision because of the benign nature.

Case Report

Patient Sengan (Fig. 1), 50 years old male, cooly by profession was admitted in November, 1969 at Government Stanley Hospital, Madras for the complaint of swelling in the left groin of eight years duration. The swelling got ulcerated and became painful for the past 15 days.

There was a similar swelling over the posterior aspect of left thigh about 20 years ago. It was removed and the operated area healed well.

The clinical examination revealed the presence of an irregular lobulated swelling 6 inches by 4 inches in the region of left groin. (Fig. 2) The skin over the swelling was tethered and at one area it got ulcerated. Each lobule was about the size of a lime, firm in consistency and essentially adherent to each other with few discrete ones. The whole mass was freely mobile over the deeper structures.

There was a solitary, isolated circumscribed swelling (2 inches in diameter) over the medial aspect of left thigh. The skin was tethered to the swelling which was firm and freely mobile.

There was no evidence of enlargement of lymph nodes anywhere in the body. Liver and spleen were not enlarged. Regions like scalp, chest and abdomen were free from similar masses. Excision biopsy was done on 28—11—69 and the raw area was covered with split skin grafts taken from thigh. (Fig. 3)

Biopsy Report

Keratinisation and hyperplasia of squamous epithelium. Few hair follicles and a number of cystic glandular structures lined by 2 to 3 layers of small cubical cells containing colloid like secretion. In some areas the cells are arranged in a cylindromatous pattern.

^{*} Post Graduate Student

[†] Asst. Prof. of Surgery

[‡] Reader in Surgery and Urologist Govt. Stanley Hospital, Madras and Stanley Medical College, Madras Received for Publication on 3—1—1972



Fig. 1
Photograph of the patient

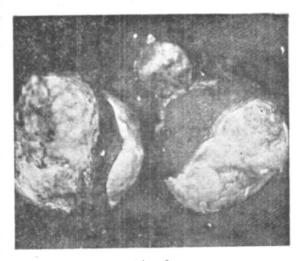


Fig. 2

Photograph of specimen excised. It shows the lobulated mas with the area of skin ulceration



Fig. 3
Photograph showing the operation site after skin grafting

Microphotographs

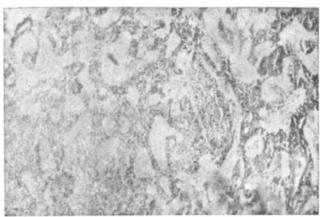


Fig. 4 (a)

Low power showing cylindromatous type of acini with few hyaline patches around it

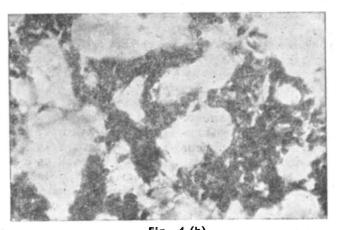


Fig. 4 (b)

High power showing 2 to 3 layers of small cubical cells with rounded nuclei, hyaline substance seen around the acini

Appearances are suggestive of Syringoma, arising from the apocrine gland structures. (Fig. 4)

Discussion

The interesting features in this particular case are as follows:—

1. Clinically there was a remarkable resemblance to Lymphomas. The discrete lobular mass with free mobility and intact epidermis in spite of long duration (10 years) make one to think

about the possibility of Hodgkin paragranuloma.

- 2. Among the Apocrine sweat gland tumours there are two varieties.
 - (a) Cylindroma (

(b) Syringoma

The former arises from gland and the latter from duct.

The two can be differentiated on following grounds.

Cylindroma

1. Numerous rounded smooth tumours resembling bunches of grapes or tomatoes. Each mass is about 3 to 4 cm. thick.

- 2. Site: Scalp, trunk, Limbs.
- 3. Sex: Women.
- 4. Microscopic Appearance.
 - (a) Numerous variously sized islands of epithelial cells in cylindrical masses.
 - (b) Thick band of hyaline substance surround these islands.

Syringoma

Hundreds of small, firm yellowish nodules, size varying from few mm. to 10 mm.

Site: Neck, Chest, Eyelids, Abdomen Anterior aspect of thigh.

Sex: Women.

Microscopic appearance.

- (A) Resembles apocrine-Sweat duct cell pattern Tad pole like (or) comma shaped duct cell seen.
- (B) Less connective tissue hyaline is the striking feature.

The following interesting points were noted from our case report.

- a) Though the biopsy report was Syringoma, clinically the tumour resembled the microscopic appearance of Cylindroma. i.e. like potato tumours which occur in scalp, the tumour presented in the form of large lobular masses in the groin. May be syringoma, rarely presenting clinically like cylindroma.
- b) Site: Groin is rather a rare site for both the tumours.

- c) Sex: Adolescent women are more commonly affected. We have recorded the case in a man aged 50 years.
- d) Microscopical appearance. Though the cells were arranged in cylindromatous pattern in some areas, the lack of thick band of hyaline substance around the cellular masses rules out the possibility of cylindroma. (Fig. 4)

It is difficult to differentiate the origin of these tumours apocrine (or) sweat gland histologically.

EPIDERMAL TUMOURS

O.F.

CLASSIFICATION Tumours of the Surface Epidermis

Nevoid tumours (Hamartomas)

Carcinoma Keratosis senilis 1, Precancerous

Nevus Verucosus (Pappilloma)

ૡ૽

Epidermal cysts

ف

Carcinoma eg. Basal cell carcinoma

Nevoid tumours

Tumours of the Epidermal

Appendage

from primitive Epithelial germ cells which do not differentiate at all.

From primitive Epithe-lial germ cell attained certain degree of differentiation

Non-Organic Hamartoma

Organic Hamartoma

eg. Basal cell epithelioma

Squamous cell Carcinoma Carcinomatous Leukoplakia

(Intraepidermal sq. cell **Bowens Disease** carcinoma)

લં

Pagets disease

Sebaceous **ب** ပ Carcinomas usually arise from mature cells Rarely from embryonal cells which have become anaplastic

b. Hair epithelioma Hair differentiation a. Hair Nevi b. Cylindroma Apocrine-Sweat Differentiation a. Syringoma Sebaceous adenoma Sebaceous Nevi Differentiation Sebaceous

Myoepithelioma

ပ

epithelioma

Note: Nevoid tumours (or)
Hamartomas arise from primitive epithelial germ cell.
(Embryonal cells)

d. Hydradenoma

Some authors regard it as sweat gland tumour and some as apocrine tumour. Both are indistinguishable histologically. Points in favour of apocrine genesis are 1. Presence of two type of cells, secretory and myoepithelial cells. 2. Occasional presence of actively secreting glandular lumina. 3. Its simultaneous occurrence with trichoepithelioma (a tumour of hair structure.)

Most investigators still consider these tumours to be related to sweat glands principally because of acini resembling sweat duct or glands.

Hydradenomas and other apocrine sweat gland tumours are solitary and lack histologically the typical features of syringoma to cylindroma.

When these lobular masses of sweat gland tumours appear over the scalp, it may be confused with sebaceous cysts. But the latter are less numerous, and not lobulated; sebaceous cysts possess pultaceous consistency.

These sweat gland tumours have common anlage (origin) with sebaceous gland and hair follicle tumours (Refer the classification of epidermal tumours).

REFERENCES

- 1. Willis RA: Pathology of Tumours. Butter Worth & Co., London, 1967, P. 274.
- Payling Wright G: Systemic Pathology. Longman Green & Co., London, 1966, P. 1524.
- Coloviros Jr G J: Turban Tumours. JAMA 147: 756, 1951.
- 4. Janota I: Adnexal alain tumours in nivaria, Brit J Derm 79: 259, 1967.
- George Clinton Andrews: Diseases of Skin. W. B. Saunders Co., Philadelphia & London, 1955, P. 676.

Management of the Sweat Gland

Biopsy confirms the diagnosis. It may be in the form of excision biopsy provided the mass is not adherent to deeper structures.

Treatment is by excision or electro surgery. If the mass is mobile, it can be excised completely. When raw areas are left behind which cannot be covered by skin, split skin grafts can be done. In cases involving the entire scalp the disease can be treated successfully by removal of few tumours at a time.

Summary

Certain sweat gland tumours can resemble lymphomas clinically, especially when they occur in regions like groin or axilla. The two varieties of sweat gland tumours, Cylindroma and Syringoma can resemble each other both clinically and microscopically because of common origin. These tumours are benign usually and can be treated by excision.

Acknowledgment

Our thanks are to Dr. K. P. Sarathy, Dean, Stanley Medical College and Hospital for permitting us to publish this case and to Dr. Grace Samidoss, Professor of Pathology, for her valuable guidance.

- Walter F L: Histopathology of the skin-Pitman medical publishing Co Ltd, London, 1954.
- 7. Homma H, Easher: Genesis of Syringoma. Arch Derm and Syph 33: 700, 1936.
- 8. Herbert Z Lund: Atlas of tumour pathology. Armed forces Institute of pathology, America, 1957, P. 80.
- Lever W F: Pathogenesis of Benign tumours of cutaneous appendages and of basal cell epithelioma Arch Derm and Syph 57: 679, 1948.