

## HIDERADENO CARCINOMA

### Case report

NEERA LAL \* GAURI BAZAZ MALIK † AND PREM MUKHERJEE ‡

#### Summary

Hideradeno Carcinoma is a rare tumor. A case with clinico pathological correlation is being presented along with brief review of medical literature.

The subclassification of sweat gland carcinomas with well defined clinico-pathological characterisation and correlation is now emerging from the reviews of the medical literature. Apocrine Carcinoma<sup>1</sup>, primary mucinous adeno carcinoma<sup>2</sup>, hideradeno carcinoma<sup>3</sup> and malignant eccrine poroma<sup>4</sup> are four such distinctive neoplasms. Because of varying prognostic outcome and framing of an appropriate therapeutic strategy, a correct diagnosis becomes very essential. With this in view, a detailed clinicopathological description of a case of clear cell hideradeno-carcinoma is reported.

#### Case Report

A 60 year old female patient was admitted to the hospital of the Lady Hardinge Medical College, New Delhi, in March, 1977. She complained of a gradually increasing ulcerating mass (5 x 3 x 2 Cm) on the lateral aspect of the left arm for two years. A complete

excision of this lesion was done and submitted for histological diagnosis.

#### Gross Description

The excised surgical specimen fixed in 10% buffered saline comprised of a nodular mass (5 x 3 x 2 Cm) partially covered by skin which was ulcerated towards the centre. It was a firm, solid mass which on cut surface revealed light brown homogenous appearance with small areas of haemorrhage and necrosis. Tissue was processed for paraffin sections and stained with H and E, PAS, mucicarmine and Best carmine.

On microscopy, a piece partially covered by skin with slight acanthosis on one side was seen. It was ulcerated towards the centre and underlying dermis was replaced by groups and sheets of round, oval and polygonal cells extending into deep dermis and subcutaneous tissue. Nuclei were round, oval, vesicular and showed marked nuclear pleomorphism and anaplasia. At places these cells were lining cystic spaces filled with necrotic debris or enclosed tubular lumina with papillary projections (Microphotograph I). These tubular lumina were lined by multilayered cuboidal to squamoid cells also enclosing small ductular lumina, thus representing intradermal eccrine differentiation (Microphotograph II). The

\* Senior Regisident, Pathology Department

† Prof. and Head of Pathology Department

‡ Prof. and Head of Surgery Department  
L. H. M. C., New Delhi

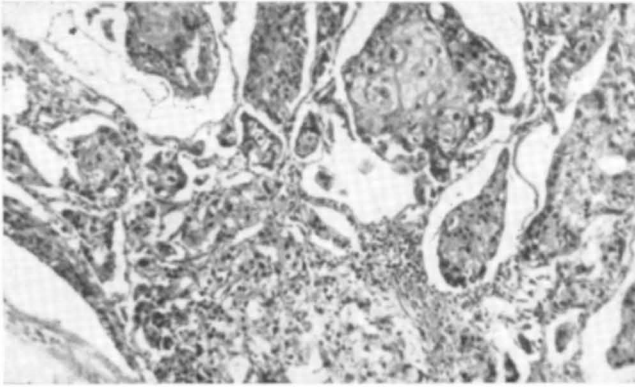
Request for reprints :

Dr. Gauri Bazaz Malik

Prof & Head Pathology Dept.

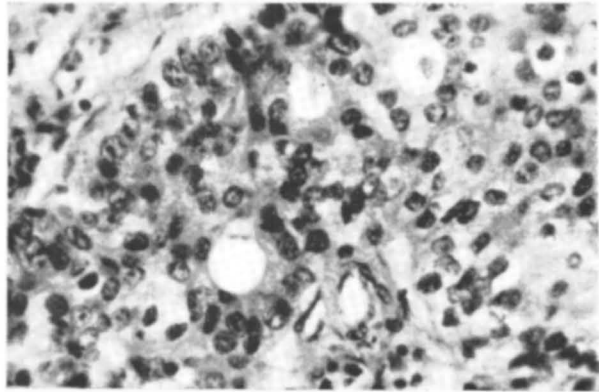
Lady Hardinge Medical College  
New Delhi

Received for publication on 25-9-1979.

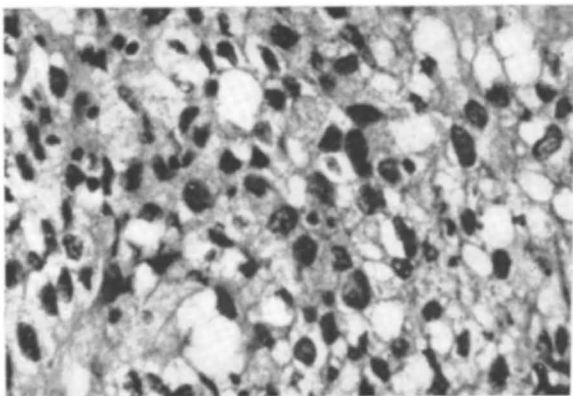


**Fig. 1** (H & E  $\times$  40) Tumor cells enclosing cystic spaces with papillary projections.

solid masses comprised of sheets of clear cells with nuclear anaplasia, atypical mitosis and vacuolated to clear pink cytoplasm (Microphotograph III). Some of these cells polygonal or squamoid showed an attempt at pearl formation. A third type of spindle shaped cells with vesicular nuclei and nuclear pleomorphism was seen. Small undifferentiated cells with pink cytoplasm and pleomorphic nuclei were also seen.



**Fig. 2** (H & E  $\times$  100) showing tumor cells enclosing tubular lumina.



**Fig. 3** (H & E  $\times$  100) showing tumor cells with nuclear anaplasia and vacuolated cytoplasm.

PAS, and mucicarmine showed a strong to weak positivity in the clear cells.

*Follow up*

In January 1979, this patient presented with a nodule on the anterior chest wall and enlarged cervical lymph nodes. Aspiration biopsy from both these sites revealed malignant cells lying isolated and in groups, enclosing spaces and at places forming papillary

projections, resembling the pattern seen in the tumor from the arm, excised two years earlier.

**Comment**

Hideradenocarcinomas are rapidly growing tumors which are malignant from the beginning. The major criteria for the diagnosis in the present case were — rapid growth, large size, extension into surrounding tissues, ulceration of the epidermis, differentiation towards intradermal eccrine structures, presence of

TABLE 1

S. No.	Authors	Age (Years)	Sex	Location	Duration	Size	Metastasis	Survival
1.	Keasby & Hadley (1954) <sup>5</sup>	77	F	Temple	2 years	2.0 Cm	Nodes, bone	DWD
2.	—do—	84	M	Wrist	2 years	2.0 Cm	—do—	—do—
3.	—do—	29	F	Temple	15 years	3.0 Cm	—do—	—do—
4.	Mackensie (1957) <sup>6</sup>	53	M	Finger	20 years	—	—	—
5.	Kersting (1963) <sup>7</sup>	68	M	Nose	1 year	2.6 Cm	—	—
6.	Santler (1965) <sup>8</sup>	58	M	Cheek	1 year	10.0 Cm	—	DWD
7.	Headington et al (1978) <sup>9</sup>	62	F	Foot	1 year	4.0 Cm	Nodes	—
8.	Present Case	10	F	Arm	2 years	5.0 Cm	Nodes	AH

DWD :—Died with disease

AH :—Alive & Healthy

clear cells which resemble the secretory cells of eccrine glands and spindle shaped cells resembling myoepithelial cells as well as metastases to lymph nodes.

Seven cases of hiperadenocarcinomas with clinical details are available in the medical literature (Table 1). Review of these cases reveals a wide range of clinical presentation of age, site and size. Four of these cases died within 1–5 years of the initial diagnosis. Five showed metastasis to regional lymph nodes. Another series of 18 cases reported by Berg and Mc Divitt (1968)<sup>10</sup> gives no clinical details. The present case is being described in view of its unusual clinical course; the patient being alive almost 5 years after appearance of the first lesion and three years after diagnosis.

**References**

1. Baes H and Suurmond D: Apocrine Sweat Gland Carcinoma, Report of a case, Br J Dermatol, 83 : 483, 1970.
2. Headington JF: Primary mucinous carcinoma of skin, Cancer, 39 : 1055, 1977.

3. Hashimoto K, DiBella RJ and Lever WF: Clear Cell Hideradenoma, Arch Dermatol, 96 : 18, 1968.
4. Johnson BL Jr and Helwig EB: Eccrine acrospiroma, A clinicopathological study, Cancer 23 : 641, 1969.
5. Keasby LE and Hadley GG: Clear Cell Hideradenoma Report of three cases with widespread metastasis, Cancer. 7 : 934, 1954.
6. Kersting DW: Clear Cell Hideradenoma and Hideradeno-Carcinoma, Arch Dermatol, 87 : 323, 1963.
7. Mackenzie DH: A clear cell Hideradeno Carcinoma with metastasis, Cancer, 10 : 1021, 1957.
8. Santler R and Eberhartinger C: Malignes Klarzellen - Myoepithelioma, Dermatological, 130 : 340, 1965.
9. Headington JT, Niederhuber JE, Theodore FB: Malignant clear cell acrospiroma, Cancer, 41 : 641, 1978.
10. Berg JW and Mc Divitt RW: Pathology of Sweat Gland Carcinoma, Path Annual, 3 : 123, 1968.