

ADENOMA OF THE NIPPLE DUCTS

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Adenoma of the nipple is a rare pathological condition [1 case out of every 4000-5000 observations⁽²⁾] and is often confused clinically with other conditions^(3, 5, 6, 10, 11).

The purpose of this note is to report a case with galactographic documentation of intracanalicular proliferation (a picture not so far reported by other Authors) and to take our case as a starting point for some observations on the clinical and radiological differential diagnosis.

During 1977 we observed three cases of adenoma of the nipple (one of which was bilateral), whose clinical and radiological characteristics are summarized in table 1.

These three cases were compared with two cases of chronic aspecific inflammation and with four cases of Paget's disease of the nipple, that we observed during the same period.

From the clinical point of view two fundamental pictures could be outlined:

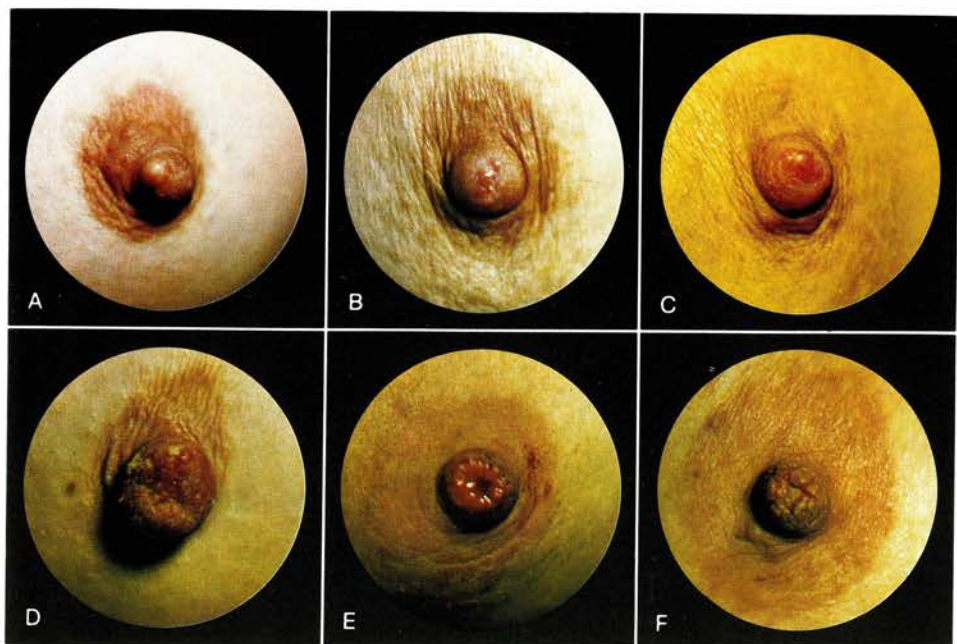
A) Pseudo-tumoral form, "florid papillomatosis"^(7, 8, 9), characterized by the presence on the nipple of a hard hump-like structure, more or less round, well circumscribed, which distended the skin without breaking it (fig. 1, A).

B) Erosive form, "erosive adenomatosis"⁽¹⁰⁾ characterized by the presence on the nipple of erosion and fissures, running a chronic course, accompanied by the secretion of serum or serum and blood (fig. 1, B, C). This is the form which has posed great clinical problems in the differential diagnosis between chronic aspecific inflammation (fig. 1, D) and Paget's disease. In the latter condition the diagnostic suspicion is facilitated by the presence of considerable erosion of the nipple with secretion of blood (fig. 1, E), while in the cases in which the nipple had a crusty, dry appearance (fig. 1, F), the clinical diagnosis was of eczema.

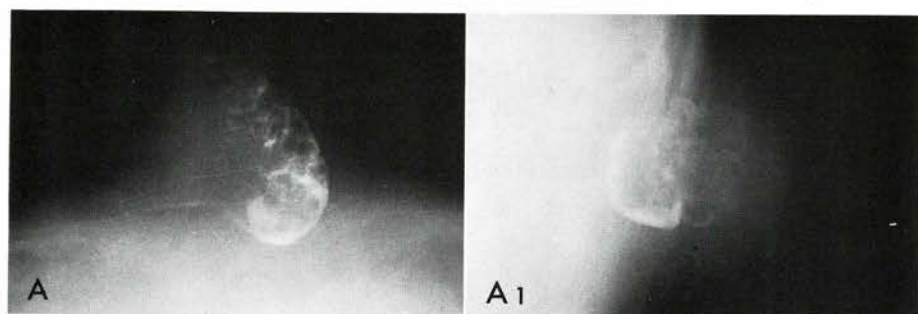
From the radiological point of view all patients were subjected to the routine examinations as telethermography, mammo-

SUMMARY

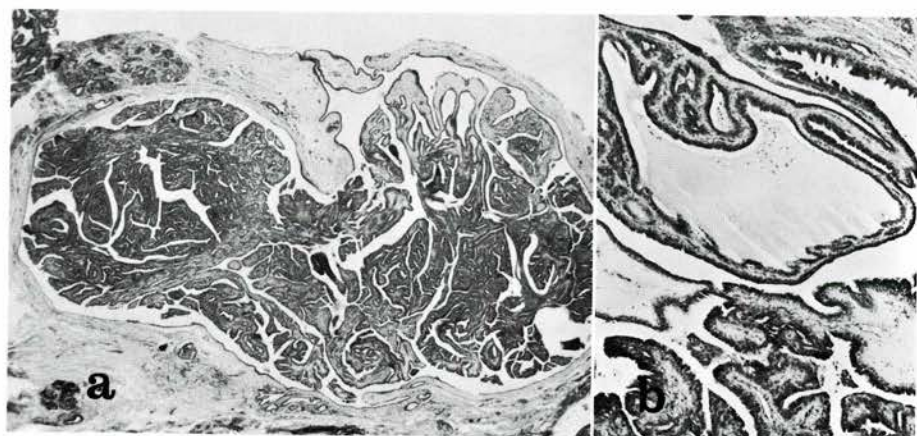
The Authors report a case of adenoma of the nipple which was demonstrated by galactography, and take this case as a starting point for reporting some observations concerning the differential diagnosis between chronic aspecific inflammation of the nipple and Paget's carcinoma.



1)



2)



3)

Fig. 1. — A: Pseudo-tumoral appearance of adenoma of nipple. B, C: Erosive appearance of adenoma of nipple. D: Chronic aspecific inflammation of nipple. E: Erosion of nipple and secretion of blood in Paget's disease. F: Dry, crusty appearance of nipple in Paget's disease.

Fig. 2. — Galactography in a case of adenoma of nipple: ectasia of a terminal duct with intraluminal defects.

Fig. 3. — Histological picture of case 2. a: Magnification $25\times$; haematoxylin + eosin stain. Papillary proliferation in lumen of a markedly ectatic duct. b: Magnification $140\times$; haematoxylin + eosin stain. At higher magnification stromal axes can be seen covered by epithelial cuboid and cylindrical cells, sometimes arranged in several layers.

Table 1.

Case	Name	Age	Clinical examination	Mammography	Thermography	Diaphanoscscopy	Galactogr.	Clin.-rad. results	Hystopathology	Therapy
1st	V. L.	35	Nodule	Neg.	Neg.	Neg.	—	Adenoma	Adenoma	Nipple-resection
2nd	S. A.	35	Bilat. nodule Skin clefts Serous secret.	Neg.	Neg.	Neg.	Endoluminal defects	Adenoma	Adenoma	Bilateral nipple-resection
3rd	L. S.	58	Erosion Bloody secret.	Neg.	Susp.	Neg.	—	Paget?	Adenoma	Nipple-resection
4th	B. T.	62	Erosion Little scabs Serous secret.	Neg.	Susp.	Neg.	—	Paget? Adenoma?	Aspecific chronic flogosis	Medical
5th	P. I.	47	Bilateral Nodule	Neg.	Neg.	Neg.	—	Adenoma	Aspecific chronic flogosis	Medical
6th	C. M.	50	Erosion Little scabs	Retroareolar microcalcif.	Neg.	Neg.	—	Paget?	Paget	Radical mastectomy
7th	G. E.	69	Erosion Bloody secret. Little scabs	Typical microcalcif.	Pos.	Pos.	—	Paget	Paget	Radical mastectomy
8th	D. E.	59	Erosion Bloody secret. Little scabs	Typical microcalcif.	Pos.	Pos.	—	Paget	Paget	Radical mastectomy
9th	F. M.	36	Erosion Bloody secret. Little scabs	Typical microcalcif.	Pos.	Pos.	—	Paget	Paget	Radical mastectomy

graphy and transillumination of the breast.

These three tests, as expected, did not lead us to make the differential diagnosis between adenoma and chronic aspecific inflammation of the nipple. In the cases of Paget's disease, however, the finding of typical microcalcifications frequently associated with hyperthermia and with retroareolar opacity on transillumination enabled us to make a definitive diagnosis (three cases) or a well-grounded suspicion (one case) of carcinoma.

At any rate it was clearly useful to apply instrumental tests in cases of adenoma and of chronic inflammation of the nipple, since the negative results enabled us to discount the suspicion of Paget's disease; only cases 3 and 4 were an exception to this - here the thermographic finding of suspected disease counteracted the negative results of mammography and transillumination.

Galactography, however, was the only instrumental test that made possible to demonstrate the adenoma directly; the characteristic finding was ectasia within the duct and intraluminal defects limited to the nipple. We were able to perform this test in one of our patients who had an adenoma and the images are reproduced in fig. 2.

From the histological point of view (fig. 3), adenomatous proliferation of the

duct epithelium was encountered, with more or less conspicuous papillary proliferation, limited to the ducts of the nipple.

All our cases were treated by resection of part or all of the nipple, depending on the extent of the lesion, with subsequent reconstruction. This lesion is in fact absolutely benign and should be remembered in considering the differential diagnosis of conditions of the nipple, so as to avoid useless destroying surgery (^{1, 4, 9}).

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