

# Intra Cystic Papillary Carcinoma of the Breast about a Case

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**Abstract:** *Intra-cystic papillary carcinoma (CPIK) of the breast is a variant of intra-ductal carcinoma, the incidence of which is of the order of 0.5% to 1% of breast cancers. It is a papillary lesion localized in a dilated or cystic milk duct. These lesions can be of two types: either a single central lesion, referred to as intra cystic papillary carcinoma; either multifocal lesion originating in the lobules. Its anatomopathological aspect is characteristic, it must be differentiated from ductal carcinoma in situ or invasive carcinoma, which are sometimes associated [1,2]. The prognosis for CPIK appears excellent in its isolated form, but taking treatment is not clearly established, hence the risk of abusively treating such lesion. From this study about 1 case; we will recall the diagnostic aspects, treatment and development of this rare tumor.*

**Keyword:** Intra cystic papillary carcinoma, CPIK, breast cancers

## Introduction

Intra-cystic papillary carcinoma (CPIK) of the breast is a variant of intra-ductal carcinoma, the incidence of which is of the order of 0.5% to 1% of breast cancers. It is a papillary lesion localized in a dilated or cystic milk duct. These lesions can be of two types: either a single central lesion, referred to as intra cystic papillary carcinoma; either multifocal lesion originating in the lobules. Its anatomopathological aspect is characteristic, it must be differentiated from ductal carcinoma in situ or invasive carcinoma, which are sometimes associated [1,2]. The prognosis for CPIK appears excellent in its isolated form, but taking treatment is not clearly established, hence the risk of abusively treating such lesion. From this study about 1 case; we will recall the diagnostic aspects, treatment, and development of this rare tumor.

## Observation

This is a 60-year-old patient who underwent a thyroidectomy 8 years ago under levothyrox 150 µg, multiparous; menopausal for more than 8 years, without notion of taking treatment hormone replacement, which comes in for a single episode of nipple discharge; without nodules nor mastodynias. On examination, we note the presence of a single-pore nipple discharge made up of old blood; a 1h of the right breast. A bilateral mammogram performed, shows breasts of type II; an increase in density of the supero-outer quadrant with concave edges classified ACR3; five Regular round calcifications of the supero-external quadrant of the right breast classified ACR2; of them opacities of the supero-external quadrant of the right breast compatible with lymph nodes. Ultrasound mammary concluded in ductal dilation with echogenic retroareolar and quadrant content supero-external of the right breast with individualization of an endocanal bud over the 10h radius 1.5cm from the nipple measuring 9 \* 4.5mm and avascular doppler classification ACR4.

Anatomopathological examination after micro biopsy of the tissue lesion classified ACR4 shows a histological and immunohistochemical appearance in favor of a papilloma. The patient underwent a pyramidectomy after ultrasound identification of the affected canal. Pathological examination of the surgical specimen revealed breast parenchyma with intraductal papillary lesions. It is associated with lesions of simple ductal hyperplasia and atypical. There are some ductal ectasias with cylindrical metaplasia and apocrine metaplasia therefore presence of suspicious cells requiring complement immunohistochemical. The limits: less than 4mm; greater than 5mm; deep at 2mm; earlier than 8mm; internal and external greater than 10mm. Immunohistochemical evaluation of hormone receptors showed: Receptors estrogenic: positive at 40% Positive progesterone receptors at 60%. The patient was staffed in a multidisciplinary consultation meeting with the decision to redo a mammogram and bilateral breast ultrasound and discuss radiation therapy. Post-op bilateral mammography and breast ultrasound reveals a small area of the supero-external quadrant of the right breast near the junction of the difficult external quadrant characterize: is it a small residue or a relapse or part of a reshuffle post operative ?? Post op rearrangements in the supero-external quadrant near the junction external associated with a small collection at this level. Retro nipple canal dilation bilateral more marked on the left side. She was therefore again staffed in a multidisciplinary consultation meeting with decision: IRM breast; either right mastectomy; either guided echo biopsy of the small ganglion at the junction of the outer quadrants of the right breast; discuss hormone therapy and radiotherapy. MRI showed postoperative rearrangements of the superoexternal quadrant of the right breast close to the junction ; associated with a small intra mammary ganglion of 4mm within the range described above; all of which in favor of rearrangements without recurrence or tumor residue at this level. A few ganglion of the right axillary prolongation; slight dilation of the retro nipple canal more marked on the left side with fluid content with non-enhanced wall and unrestricted diffusion and without pathological value.

## DISCUSSION

Intra cystic papillary carcinoma (CPIK) is a particular entity of breast cancer. It's a rare malignant ductal tumor which represents 0.5 to 1% of all mammary carcinomas[1,2]. It can appear isolated or associated in the periphery with ductal carcinoma in situ or carcinoma invasive [1]. The average age of discovery varies from 55 years to 67 years according to the authors [2,3]; what is the case in our patient. It is generally characterized by slow growth with good prognosis [3]. Clinically the tumor is revealed by a central mass, more precisely in the retro-areolar region. The tumor size varies from 1 to 14cm. The tumor can also manifest as a bloody nipple discharge: this is the case with our patient, and in some cases, she may remain asymptomatic and show up during routine mammography. The achievement lymph node is rare [2,4] although present in our case. On mammography the CPIK appears usually as a round, oval or lobular opacity. The contours are generally sharp, well circumscribed but can be hidden or indistinct in places, observed on the mammogram of our patient. Spike contours are rare [5,6]. Breast ultrasound reveals the presence of a complex cystic mass with a solid nodular component, with posterior echoes reflecting spontaneous hemorrhages. Doppler mode highlights a rich, central vascularity with numerous intramural vessels crossing the solid portion of mass [2, 6, 7,8,]. Magnetic resonance imaging is sensitive, it allows to orient the diagnosis showing septation and wall nodules, but remains nonspecific in the diagnosis of papillary tumors [2,6]. The biopsy of the lesion involving the solid portion is generally informative. Macroscopic examination finds a rounded formation, or polylobed, friable and haemorrhagic limited by a fibrous and thick capsule [3,7]. In microscopy the tumor architecture is papillary, the lesion is usually located in a cystic duct, it is characterized by a small fibro-vascular tree devoid of a layer of cells myoepithelial cells, and neoplastic epithelial proliferation with the characteristics morphological features of low grade nuclear ductal carcinoma in situ (DCIS) [9,10]. More rarely ; the epithelial contingent presents characteristics of a DCIS of intermediate or high grade. DCIS can also be found in adjacent breast tissue. On the outskirts of Intra cystic papillary carcinoma, there is frequently an entrapment of structures epithelial in the fibro-hyaline wall at the origin of the pseudo-infiltrating aspects. We are talking about invasive carcinoma associated with intracystic papillary carcinoma when there is an infiltration of the breast tissue outside the wall of intracystic papillary carcinoma [9,10]. The therapeutic strategy of treatment remains variable in view of the rarity of this type of mammary carcinoma. In general the prognosis of CPIK in its isolated form appears excellent regardless of the type of intervention. The breast-conserving surgery remains the most widely used. Carter et al. [11] from a series of 7 cases of isolated IPCs, having been treated with lumpectomy, did not observe local recurrence after 7 years follow-up. The absence of axillary lymph node metastases in the study by Baron et al. [12] and that of Harris et al. [13] combined with the absence of recurrence, suggest that the treatment of choice for a Isolated CPI is an enlarged lumpectomy. However, in some cases, mastectomy may be proposed (large tumors, insufficient margins, recurrence and patient preferences)[2.14]. In our case ; given the mode of revelation and the clinical picture; the patient received a pyramidectomy and had no recurrence. No association between local recurrence rate and type of surgery has not been demonstrated [2]. Lymph node metastases remain exceptional. The Sentinel node biopsy may present an excellent alternative for evaluation lymph node in associated invasive carcinoma [1]. The role of adjuvant treatment remains controversial. However, many studies recommend radiotherapy in young people women under 50, and in forms associated with ductal carcinoma in situ [15] which is the case for patient. Chemotherapy is not compulsory. Hormone therapy is mainly prescribed to reduce the risk of local recurrence in case of hormone receptors positive, we put our patient on tamoxifen. Despite these general principles, the Optimal treatment of CPIK remains controversial [16].

## CONCLUSION

Intra cystic papillary carcinoma is a particular and rare entity of breast cancer. His prognosis is excellent in this isolated form. The diagnosis is evoked on ultrasound and then confirmed by histopathological and immunohistochemical examination. Therapeutic care remains variable, however the treatment remains conservative in the absence of an invasive component.

Keywords: Intra cystic papillary carcinoma, CPIK, breast cancers

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