

# QUIZ 1, 2 & 3

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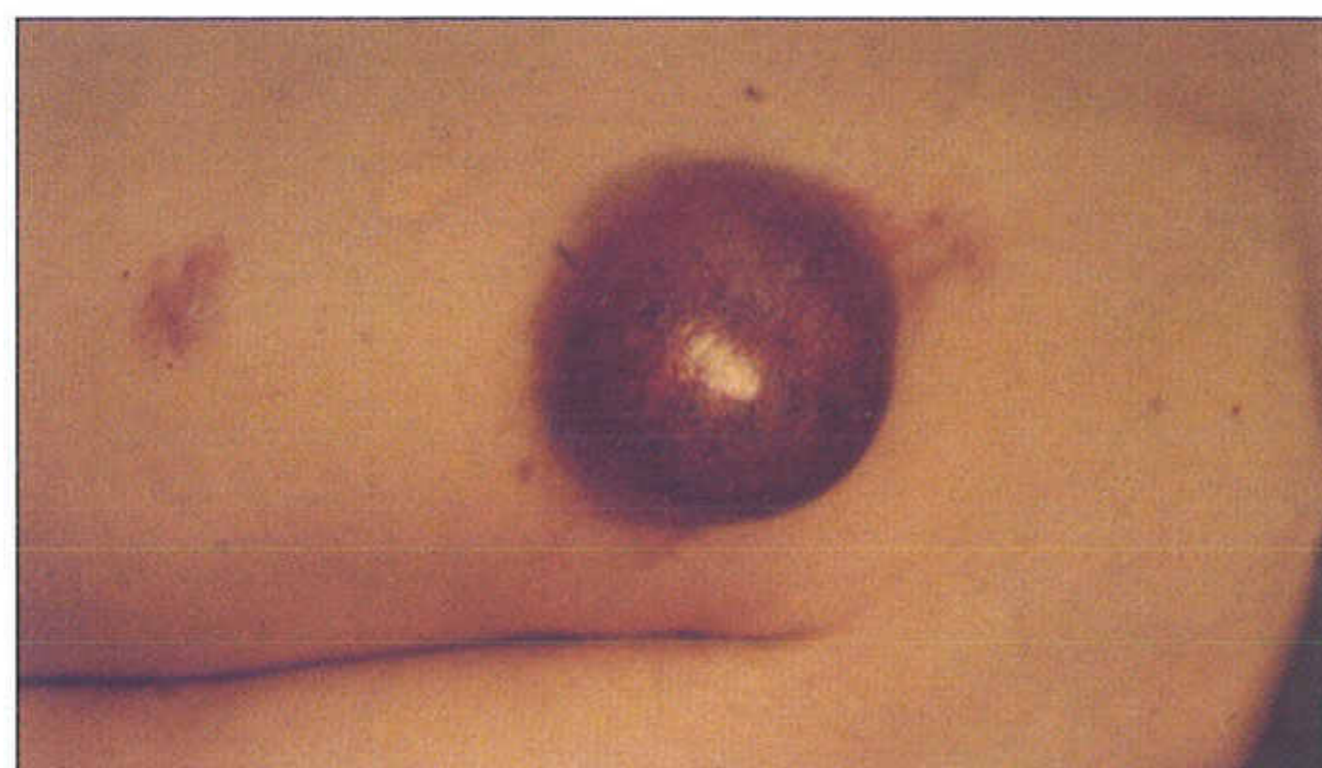
## OBSERVATIONS:

### Case No. 1:

A 40 year old woman in a bad physical condition, consulted for a recently developed nodular and angiomatous cutaneous tumor of the scapular area (Fig.1). The biopsy showed us that the tumor is composed of large polyhedral cells in glandular formations (Fig.1 bis), (Fig.1&2).

### Case No. 2:

A 64 year old man hospitalised in pneumology clinic, consulted for multiple subcutaneous nodular lesions recently developed (Fig.2). The patient was in a bad physical condition. The histologic exam showed a lymphocytoid cell proliferation (Fig.2 bis) (Fig.1,2,3,4 &5).



Case No. 1: Fig. 1: Nodular lesions



Case No. 2: Fig. 1: Several sub cutaneous nodules

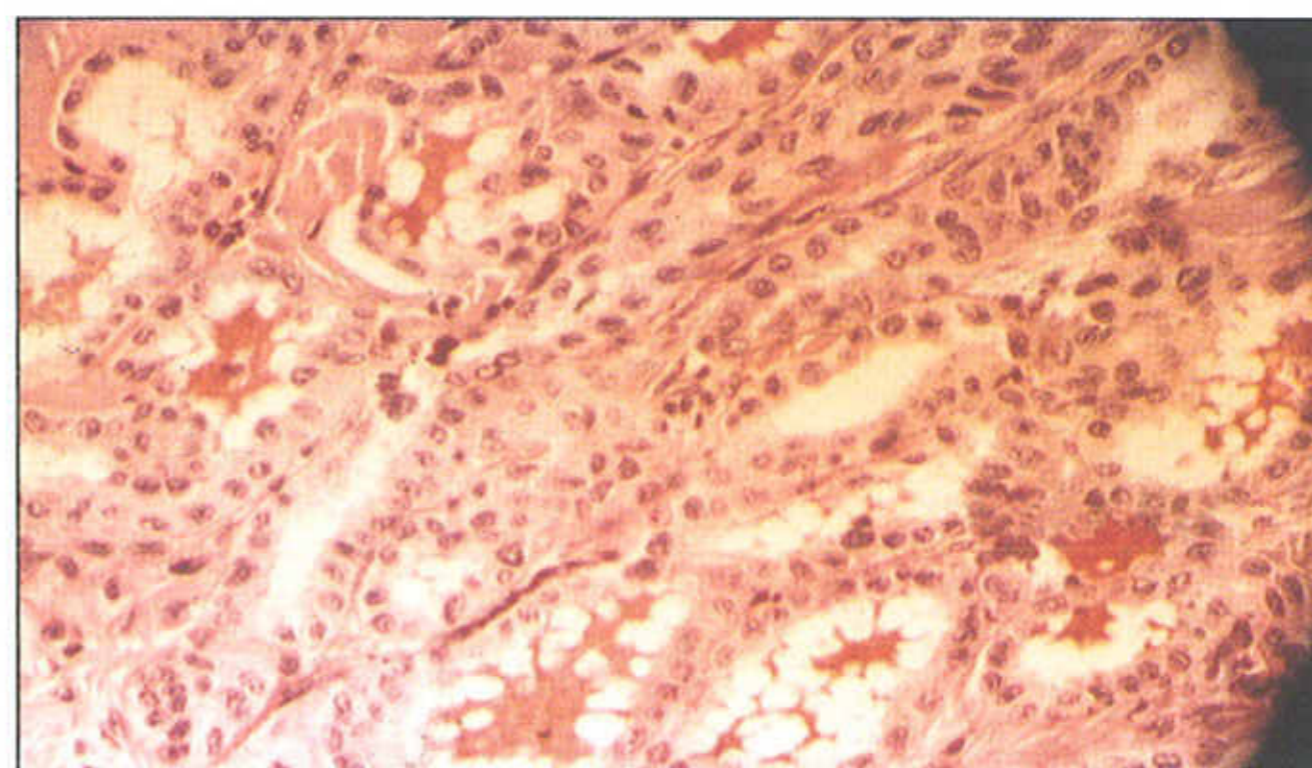
### Case No. 3:

A 60 year old patient followed for a malignant melanoma of the second toe. He underwent surgery with lymph nodes removal two years earlier.

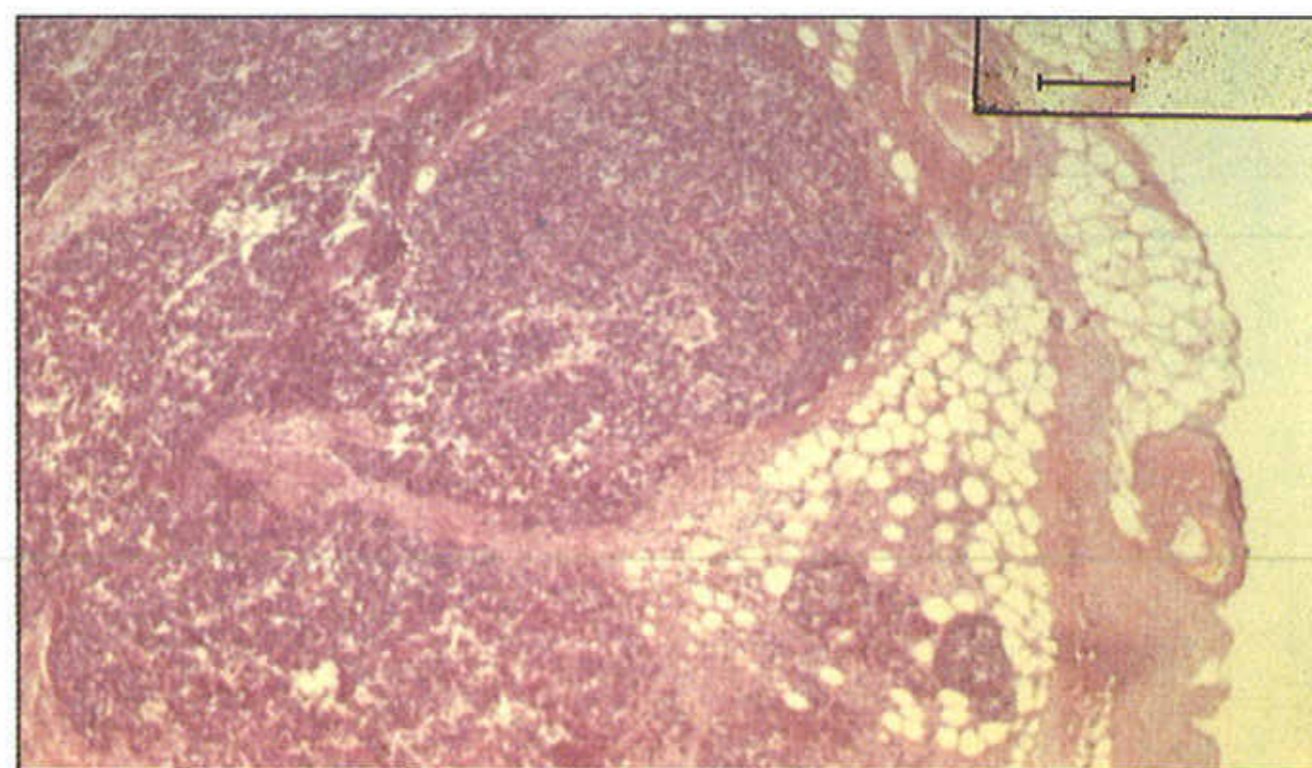
He consulted for multiple nodular and ulcerated lesions of the ipsilateral lower limb, which were the result of the initial tumor spread. The histologic exam showed a tumoral proliferation with a melanocytic aspect of the cells (Fig.3; 3bis), (Fig. 1,2,3 & 4).

## DISCUSSION:

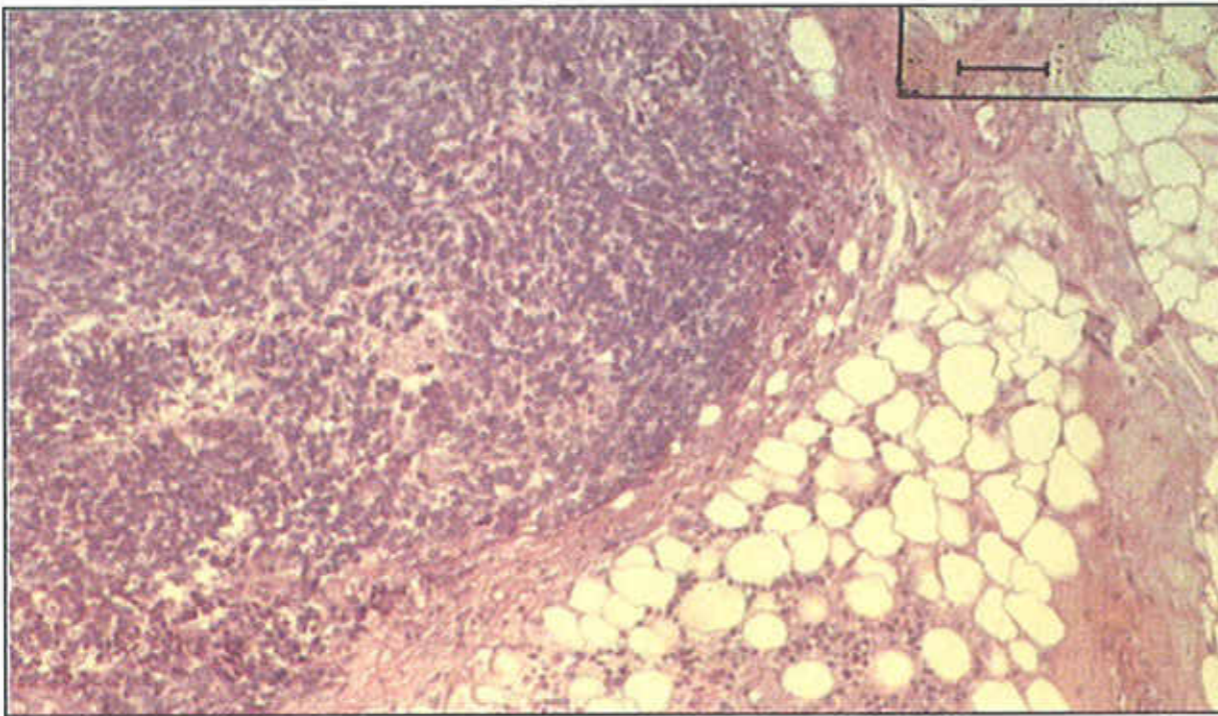
These are different clinical patterns of cutaneous metastasis: of a kidney tumor (Case No.1), a bronchiol tubes cancer (Case No. 2) and a melanoma (Case No. 3).



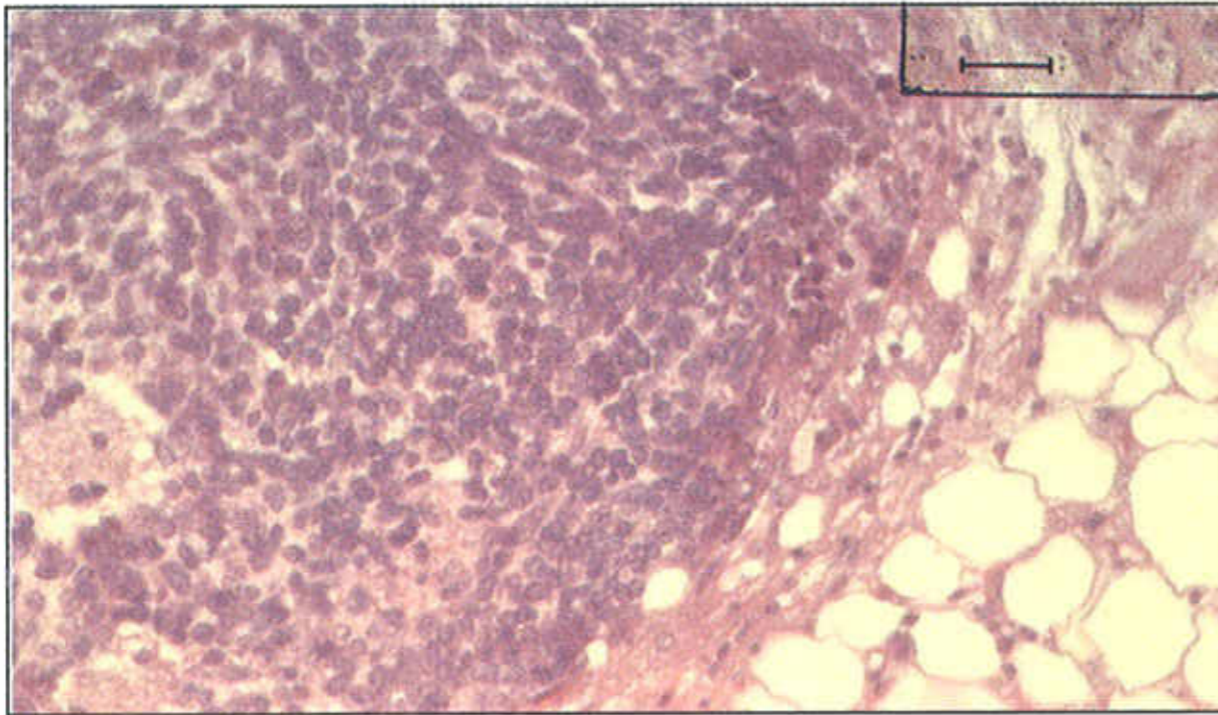
Case No. 1: Fig. 2: H.E. x 320: polyhedral cells in glandular formations



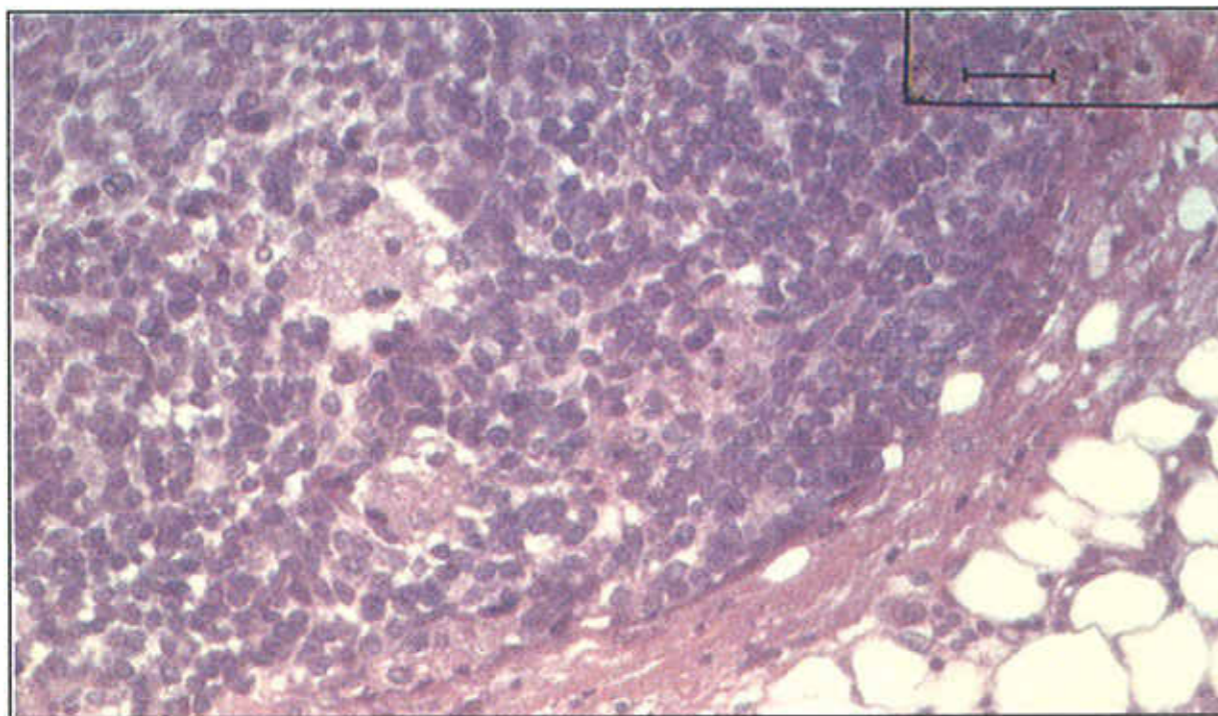
Case No. 2: Fig. 2: Lymphocytoid cell proliferation:



Case No. 2: Fig. 3: H.E. x 100



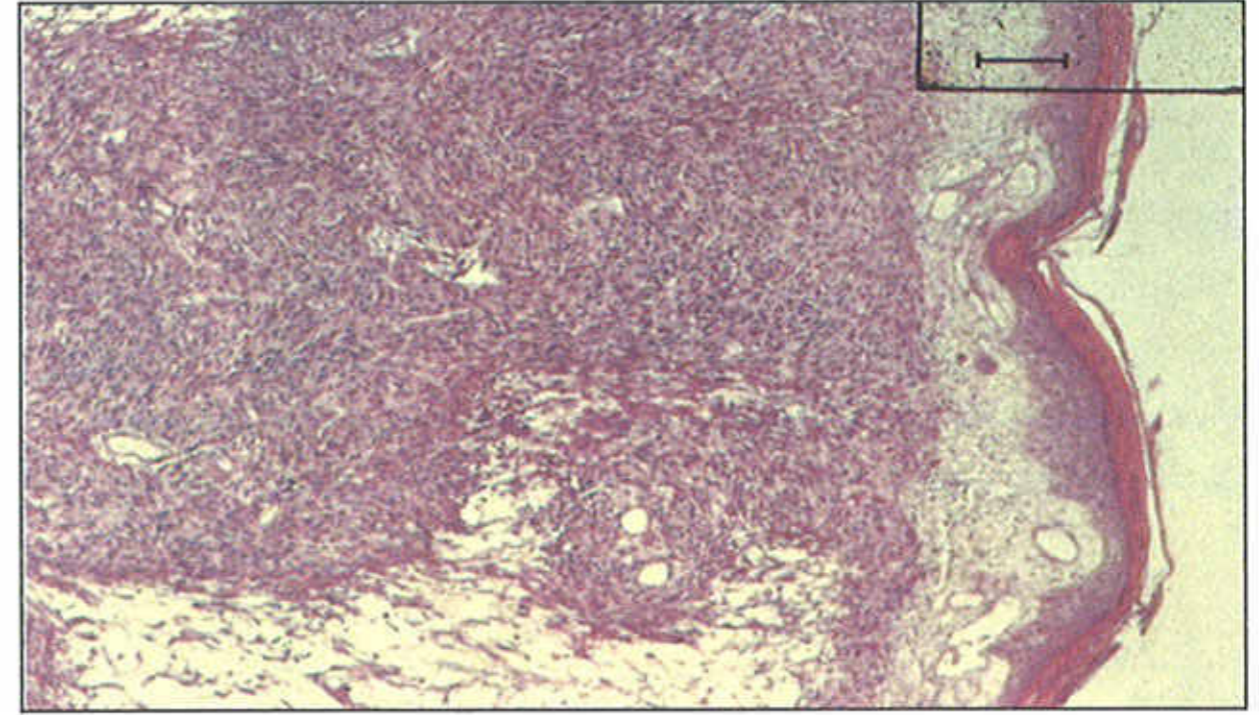
Case No. 2: Fig. 4: H.E. x 250



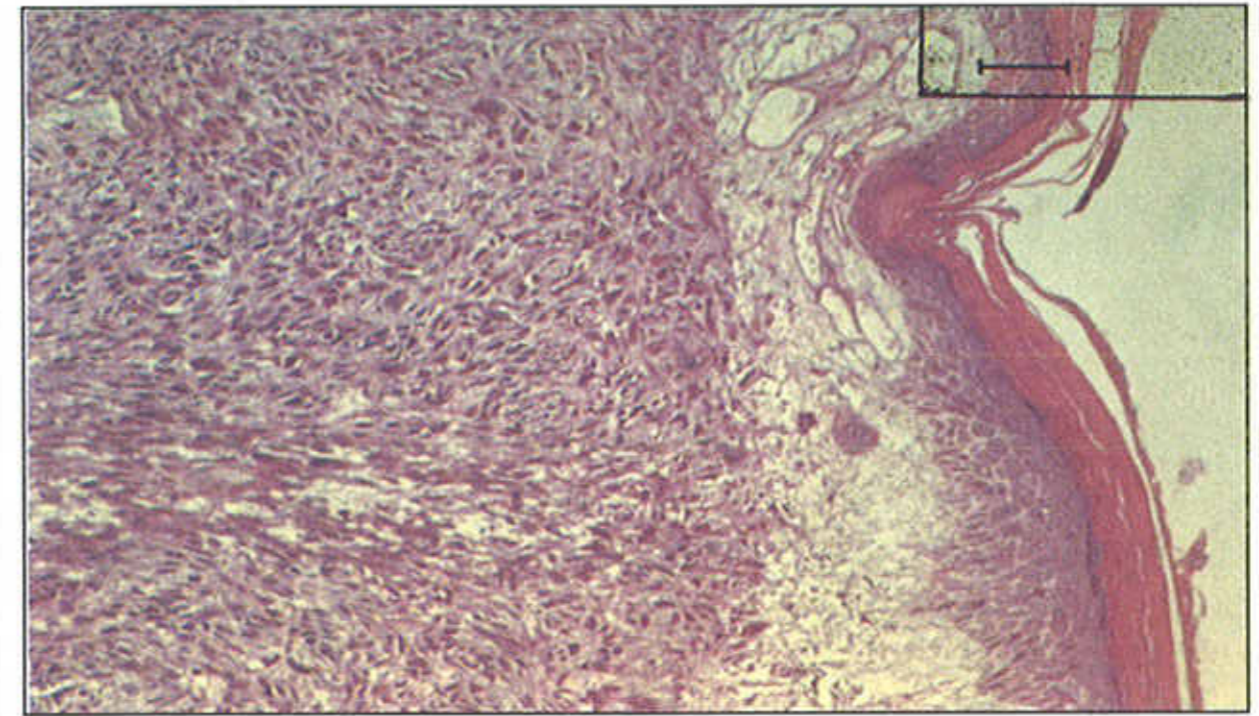
Case No. 2 - Fig. 5: H.E. x 400



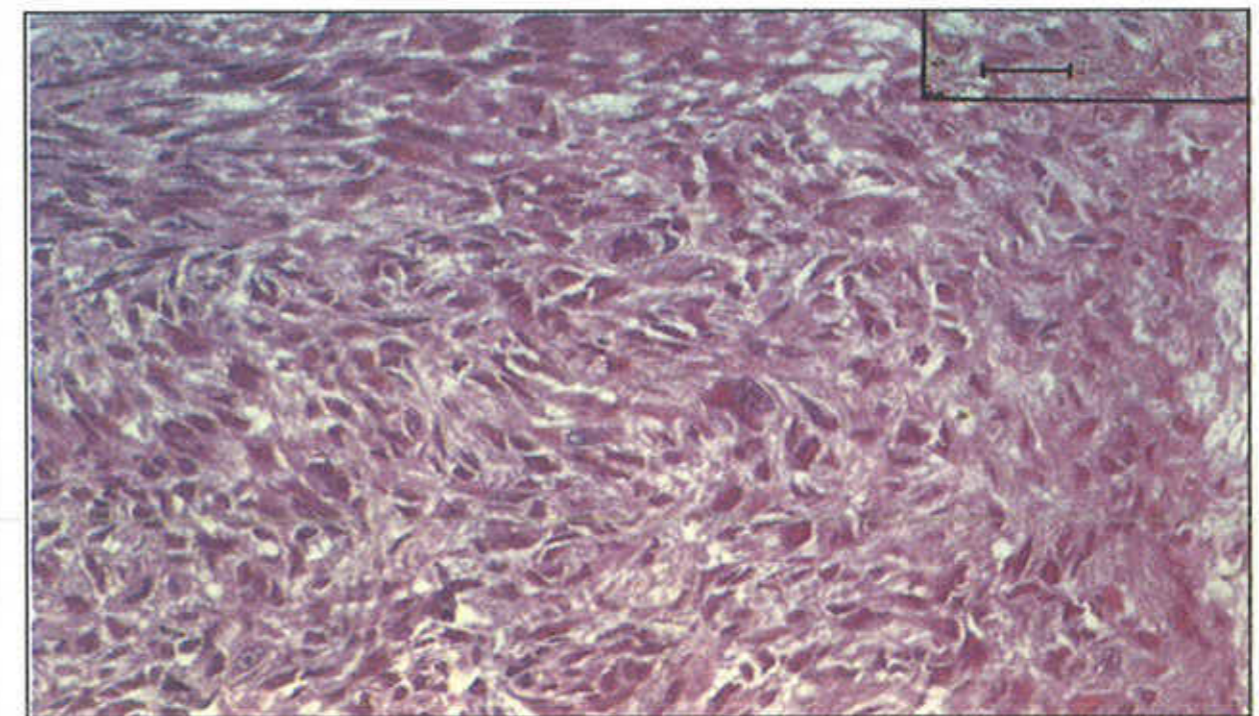
Case No. 3: Fig. 1: Nodular and ulcerative lesions on the leg



Case No. 3: Fig 2: Melanocytic proliferation: H.E. x 50



Case No. 3: Fig. 3: H.E. x 100



Case No. 3: Fig. 4: H.E. x 400

Cutaneous metastases develop in the skin integument, secondary to a distant malignant tumor located in the viscera or in the subcutaneous tissues<sup>(1)</sup>.

The mechanism of metastasis is explained by different steps which are:

- detachment from the primary tumor
- invasion and intravasation into a vessel
- circulation
- extravasation
- invasion of the recipient tissue bed
- and proliferation

The site specific tumor metastasis are explained by organ - specific receptors on tumor cell membranes<sup>(2)</sup>.

The skin is not the target tissue par excellence for the metastatic process. It is involved only in 7.8% of metastasis<sup>(1)</sup>. Actually, it is difficult to assess the frequency of the cutaneous metastases with regard to their rarity and the difficulty to follow the patients.

#### **The different clinical aspects of cutaneous metastasis are:**

##### **\*Nodular Metastases:**

This is the most frequent feature. A solitary nodular and angiomatous lesion (fig.1) evolving rapidly can be seen or multiple and small lesions (fig.2). Ulceration may follow the nodular stage (fig. 3). Neoplasms of liver and kidney are the most frequent primary lesions.

##### **\*Schirrhous Metastases:**

They give the "peau d'orange" aspect with a widespread infiltration of the skin resulting from the invasion of the skin by breast cancer: carcinoma en cuirasse.

The scalp and the abdominal wall may also be involved.

##### **\*Inflammatory Metastases:**

The most common aspect is an erythematous, warm plaque with an infiltrated and well marginated border resembling an erysipelas: carcinoma erysipeloides.

Carcinoma erysipeloides is only one of several manifestations of breast cancer that spreads to skin via lymphatics<sup>(3)</sup>. Other carcinomas from various locations may induce inflammatory metastases<sup>(4)</sup>. The zona-like metastases occurring in irradiated areas of the skin can be included in this group<sup>(5,6,7)</sup>.

##### **\*Cutaneous metastases:**

Also results from the local spread of the malignant tumors to the skin, as seen in the Paget's disease of breast and in similar cases reported in the literature<sup>(8)</sup>. One can include in this group the tumors that spread to the skin after surgery and localize in surgical incisions<sup>(9)</sup>. Other different features of cutaneous metastases may be seen such as: alopecia neoplastica, tumors mimicking a melanoma, squamous or basal cell carcinoma<sup>(10)</sup>.

#### **CONCLUSION:**

\*Cutaneous metastases are a specific skin manifestation of internal malignancy<sup>(11)</sup> and their prognosis is often poor.

There is not an evident relationship between the clinical aspect of the cutaneous metastases and the primary tumor and sometimes the diagnosis is not so easy<sup>(12)</sup>.

\* Diagnosing cutaneous metastases could be facilitated by some considerations:

- the age: some tumors are more common in the children<sup>(13)</sup>.

- some locations are evocative: example: Sister Mary Joseph's nodules<sup>(14)</sup>.

\* It is mandatory to carefully examine and pay attention to the patients's complaints. Cutaneous metastases can localize on the toes and remain undetected for a long period of time<sup>(15,16)</sup>.

\* Despite an extensive primary lesion, the cutaneous metastases may remain discreet<sup>(17,18)</sup>.

\* The histologic and immunohistochemical study of the skin's lesion may be necessary to indicate the primary tumor<sup>(19)</sup>.

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