ANAL CARCINOMA

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INCIDENCE

Cancer of the anal margin and of the anal canal accounts for 1% of all cancers of the digestive tract.
Neoplasias of the anal canal account approximately for 2.5-5% of all tumors of the colon. The most frequent forms are (90%) the epithelial that include different istotypes: intraepithelial neoplasia (dysplasia), Paget's disease, **squamous carcinoma**, Adeno carcinoma, mucin Adenocarcinoma, small cell carcinomas, differentiated carcinoma, and carcinoid.
The squamous carcinoma is generally associated to a chronic infection from papillomavirus (HPV 16-18) and its incidence is increasing in young patients, in particular in homosexuals and in the immunedepressed. The **adenocarcinoma** often originates from the mucosa of the distal rectum and has a worse prognosis than the squamous type. The **anal melanoma** develops frequently from the perineal cutis or from the anal margin. It may appear as a pigmented lesion and spread precociously to the nearby regional lymph nodes and through the blood.

ARE THERE PREDISPOSING LESIONS?

High-risk situations are HIV positive subjects, and squamous intraepithelial lesions.

Cancer of the anus can fake or develop, even if rarely on benign lesions that are very frequent such as a prolapsing haemorrhoid, a chronic anal fissure or a long neglected anal fistula; it isn't for this reason that these diseases make up pre-neoplasia conditions: in fact if the common anal lesions wrongly often considered "minor", tended to degenerate into a neoplasia, cancer of the anus would be far less rarer.

WHAT ARE THE SYMTOMS?

The clinical symptoms of tumors of the anus often appear late and frequently patients attribute **pain** and **bleeding** to more common anorectal pathologies such as haemorrhoids and fissures. Other symptoms appear as **anal rash, mucus- serous lucorrhoea or faecal incontinence**.

HOW CAN IT BE DIAGNOSED?

It can be diagnosed by the colon-proctologist through **examination** of the perineal region, **digital exploration** of the anus and the rectum to evaluate the dimensions, the location and the relative fixity of the tumor, **endoscopy of the anus**, of the rectosigmoid and a **biopsy** of the lesion for histological confirmation.

Moreover anal cancer can look like an haemorrhoid or a anal fissure, just as in its cloacogenic variety it can become a fistula in the perineal, vulvar or vaginal area; the malignant melanoma of the anus too, is similar to a pigmented nevus and there are precancerous cutaneous diseases (Bowen's dyskeratosis) or associated to cancer of the anus and of the colon-rectum (Paget's dyskeratosis) very similar in aspect and symptoms to other forms of dyskeratosis associated to anal itching. Other anal lesions that can give origin to the development of neoplasias are condylomas and pigmented nevi. Even cancer of the rectum can involve the anal canal, where it can develop.

STAGING

Computerized tomography plays an important role in evaluating the involvement of lymph nodes and their spreading at a distance. The **anal ultrasonography** is the best means for examining the extent of invasion into the cellular walls of the tumor and the connection with the sphincter apparatus, a neoplasia that doesn't go beyond the sub mucosa is classified as uT1, if it is confined to the sphincter it is classified as uT2a, if it is connected to the external sphincter it is classified as uT2b, if it extends to the perineal tissue it is classified as uT3, if it invades other organs or structures (e.g. vagina, bladder,) it is classified as uT4. The parameter T of ultrasonography is the only predictive factor of the response to treatment, of the incidence of local relapses and of the survival of patients. Global accuracy of the endoanal ultrasonography in the evaluation of the local invasion and in the identification of metastic lymph adenopathies is of 86% and 83%. The **search for a sentinel node** through lymph scintigraphy is a promising means for improving the diagnosis of a possible metastic lymph adenopathy.

HOW CAN IT BE TREATED?

Lesions confined to the sub mucosa can be adequately treated with one sole **local excision**. In other cases radiotherapy combined to **chemotherapy** can be used, and if necessary an interstitial **Brachytherapy** through fixture of needles of iridium192 guided by ultrasonography. These forms of treatment are associated to a high percentage of complete clinical remission. **Surgery** (abdomino- perineal amputation) is at present a salvage therapy for the forms that do not respond to conservative treatment.
Studies are in progress for the treatment of pre-neoplasia lesions with surgery, antivirus vaccination and with antiretroviral drugs.

FOLLOW –UP

The **failure to respond** to curative treatment and the **relapses** of the tumor within five years may reach 30%. The anal ultrasonography plays an important role in the follow up therapy with the aim of identifying a relapse before it becomes clinically evident, and therefore in a phase, which the described forms of treatment can still deal with.

Bibliography:

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