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Interest of Concomitant Radiochemotherapy for the Treatment of Advanced Basal Cell Carcinoma: About a Historical Case of the Scalp

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Absract:- Basal cell carcinoma (BCC) is the most common skin cancer, which usually occurs in the elderly with a long period of sun exposure. It is often neglected and characterized by its locoregional aggressiveness especially in its sclerodermiform form. Surgery represents the reference treatment of localized forms, but when it is not feasible, other treatments may be proposed. We report in this article a historical case of basal cell carcinoma of the scalp with a good evolution after treatment by concomitant radiochemotherapy.

Keywords:- *Advanced Baso Cell Carcinoma, Chemotherapy, Radiotherapy.*

I. INTRODUCTION

Basal cell carcinoma (BCC) is the most common skin cancer that occurs most often in the elderly white male [1]. Sun exposure is the main risk factor. Radiotherapy and chemotherapy are the basis for treatment of very locally advanced forms [2]. The objective of this work and to show the interest of this treatment by reporting a historical case of CBC of the scalp delaying with good evolution after concomitant radiochemotherapy.

II. PATIENT AND OBSERVATION

This is a 50-year-old Caucasian patient from a rural setting that is often exposed to the sun, with no specific pathological history. The history of his disease dates back to 1 year before his consultation by the appearance of a budding ulcer mass of the scalp gradually increasing in volume treated by premedication. Due to the lack of improvement and progression of the mass the patient consulted in our training with a very advanced state [image 1]. A biopsy was carried out with pathological anatomo examination, we note a histological aspect compatible with basal cell carcinoma ulcerated and infiltrating. The assessment was completed by a cerebral MRI angio which objectified the presence of a tumor process of the scalp of 120X90 mm of the bilateral frontal region, infiltrating the frontal bone, extradural space, and the upper longitudinal sinus in its anterior part and respecting the cerebral parenchyma [image 2]. the extension balance made of cervico thoraco abdominal CT was without abnormalities. After multidisciplinary consultation meeting the surgery was deemed not feasible given the extension to the superior longitudinal sinus and therefore the decision was to make a concomitant radiation chemotherapy. The patient received consistent radiotherapy [image 1],with a total dose of 70 Gy in 35 sessions with standard fractionation spread over 5 weeks with concomitant chemotherapy based on 5 weekly cures of cisplatin 40mg/m2 with good tolerance.

The patient was followed regularly in consultation, with a very good clinical and radiological evolution. After 24 months of the end of treatment, A total regression of the tumor mass regeneration of the skin substance loss was noted. Alopecia was the only objectified toxicity [image 4].

III. DISCUSSION

Basal cell carcinoma(BCC) is a slow-growing malignant epithelial tumour, generally affecting middle-aged subjects of clear phototype. Basal cell carcinoma occurs most often in adulthood, particularly from the 5th decade of life [3]. This type of carcinomas are found in two-thirds of cases in the head and neck [4]. The main risk factor is regular exposure to sunlight, but also ionizing radiation, polycyclic aromatic hydrocarbons, arsenic, burn scars and some genetic syndromes. (Xeroderma pigmentosum, nemavomatosebasocellular, epidermodysplasia verruciform) are implicated as contributing factors to the occurrence of basal cell carcinoma [5-6]. It is a cancer of good prognosis but often neglected, in our Moroccan context and especially in rural areas we often resort to premedication which delays the diagnosis and thus the management [7].

Most localized CBCs are managed by surgical treatment that must be optimal, but other treatments may be offered such as topical chemotherapy or dynamic phototherapy. The therapeutic choice should take into account the characteristics of the tumour and the patient's general condition and comorbidities [8].

Concomitant radiation chemotherapy can treat locally advanced BCCs from difficult locations such as the scalp and face, minimizing damage to adjacent tissues and cosmetic risks. A total dose ranging from 64 to 70 Gy with conventional fractionation (2Gy per day) has long been seen as a standard approach to achieving a good benefit/risk balance by reducing long-term toxicity rates while maintaining a low recidivism rate [9].

The National Comprehensive Cancer Network (NCCN) has confirmed that radiotherapy can have good

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results in terms of cure rates and aesthetic outcomes similar to surgery [10]. Treatment of advanced CBCs with chemotherapy is poorly reported in the literature. Good results are reported with cisplatin between 77% and 83% in two retrospective series [11]. The combination of concomitant radiation chemotherapy with cisplatin is poorly reported in the literature and has given good results in our patient.

IV. CONCLUSION

Platinum salts, in combination with optimal dose of radiotherapy, represent an interesting therapeutic option in highly advanced CBC's with difficult localization such as scalp and face, that allows a good regional control with good aesthetic results.

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Fig1 : clinical aspect of an historic form of basal cell carcinoma (CBC) of the scalp in a middle-aged patient

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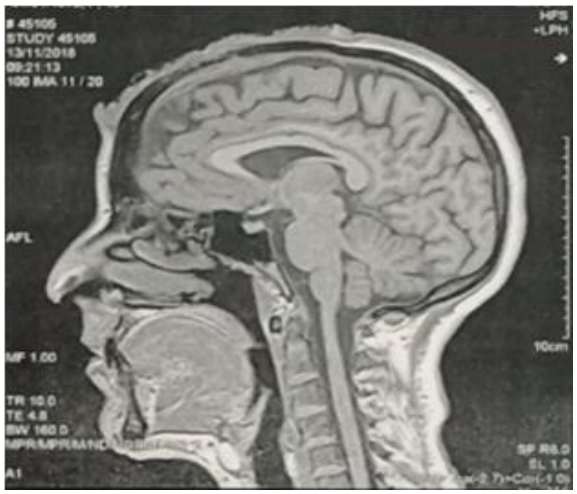

Fig 2 : MRI sagittal slice in injected T1 sequence showing the appearance of a CBC of the scalp with frontal bone lysis and infiltration of extra dural space

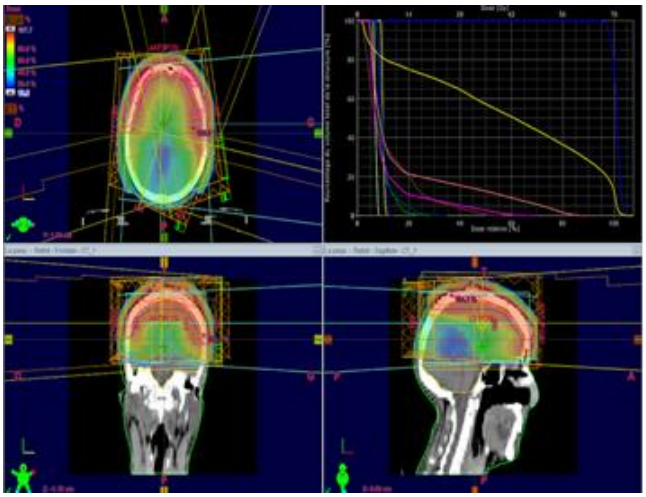

Fig 3 : dosimetric images showing radiation dose distribution at target volumes and organs at risk with dose volume histogram on the left.

Fig 4 : complete regression of the tumour process after 24 months of completion of concomitant radiation chemotherapy