

Case Report

Mandibular Rhabdomyosarcoma in an Eniente Woman: About a Case

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Abstract: Introduction: Rhabdomyosarcoma is the most common soft tissue sarcoma in patients under 25 years of age. The occurrence of mandibular rhabdomyosarcoma in a pregnant woman is rare with an incidence of 0.07 to 0.1 and the literature describes one case per 1000 deliveries. Only biopsy and histological examination make a definitive diagnosis. Treatment is based on a combination of chemoradiation and surgery. **Objectives:** To describe the diagnostic and therapeutic aspects of mandibular rhabdomyosarcoma in pregnant women. **Observation:** It was a 19-year-old patient who had consulted for left mandibular swelling evolving over 28 weeks. A morphological assessment had been requested but being almost full-term, the patient chose to let her pregnancy progress. She was seen again after delivery with a swelling that had tripled in volume with abundant bleeding on the alteration of the general condition. The imaging concluded that there was a large osteolytic mass of the mandible. The biopsy performed came back in favor of an infiltrating pleomorphic rhabdomyosarcoma. Treatment consisted of radiation therapy followed by surgery. The evolution was marked by the death of the patient after 01 month of radiotherapy. **Conclusion:** Rhabdomyosarcoma is an aggressive malignant tumor that most often affects subjects under 25 years of age and its appearance in pregnant women is rare.

Keywords: Mandibular sarcoma, pregnant woman, diagnostic and therapeutic.

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INTRODUCTION

Rhabdomyosarcoma is a malignant tumor that occurs most often in people under the age of 25. It accounts for more than 50% of soft tissue sarcomas in these age groups, but is extremely rare during pregnancy [1]. The incidence of sarcoma during pregnancy is relatively low and is found in about one case per 1000 deliveries [2]. The influence of pregnancy on the initiation, promotion and development of sarcomas is not yet clear [3]. Diagnosis is based on histological evidence. Multimodal therapy involves intense chemotherapy, radiation therapy, and surgery [4]. However, depending on gestational age, dose, and time of exposure to the different agents, this treatment can cause serious harm to the fetus, including spontaneous abortion, fetal abnormalities, growth retardation, or cardiac and hematologic toxicity, which often leads to patients to let the pregnancy progress and to be taken care of after childbirth. This clinical case led us to describe the diagnostic and therapeutic aspects of mandibular rhabdomyosarcoma in pregnant women.

OBSERVATION

It was a 19-year-old patient with no medical and surgical history who had consulted for left mandibular swelling over 28 weeks. In the history of the disease, the mandibular swelling had appeared at the beginning of pregnancy and had been treated from the outset as a dental abscess. The evolution after the onset of pregnancy was marked by an increase in the swelling which had become very painful, which motivated a consultation in our structure where a morphological assessment had been requested but being pregnant and almost at term the patient chose to let her pregnancy evolve. She was seen again after delivery with a swelling that had tripled in volume accompanied by abundant bleeding, dysphagia, all on an alteration in the general condition. The exooral examination revealed facial asymmetry, a swelling of the right hemi mandible occupying the horizontal and ascending branch with shiny skin that was painful on palpation (Figure 1). In the endobuccal we had a vestibular filling with an ulceral mucosa budding bleeding on contact with the presence of ipsilateral cervical ADP of about 3 cm (Figure 2). Imaging concluded that there was a large and osteolytic mass of the mandible (Figures 3a and 3b). A diagnostic incisional biopsy was performed and came back in favor

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of an infiltrating pleomorphic rhabdomyosarcoma. An extension assessment will be requested without any particularities. The patient will be referred to a multidisciplinary consultation meeting where she will be classified as T4N2M0. Treatment consisted of initial radiotherapy followed by surgery. The evolution was marked by a death of the patient after 01 month of radiotherapy.

Iconography



Figure 1: Swelling of the right mandible hemi



Figure 2: Ulcer-budding tumor bleeding on contact

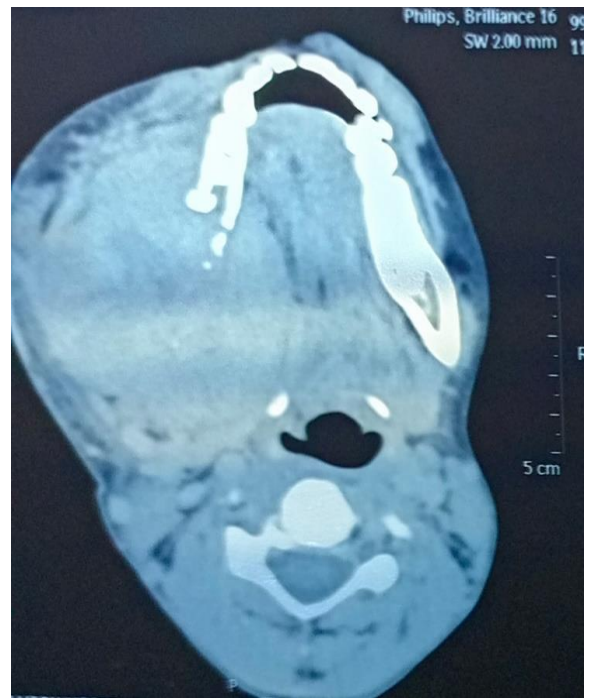


Figure 3a: Computed tomography of the facial mass in axial section of a rhabdomyosarcoma of the mandible

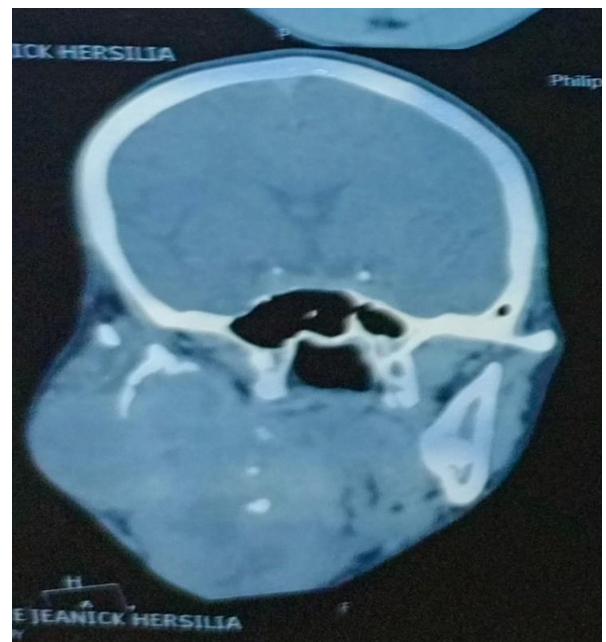


Figure 3b: Coronal section illustrating the mandibular invasion of a rhabdomyosarcoma

DISCUSSION

Malignancy during pregnancy is a sad and distressing situation for both the patient and the medical team [4]. Whenever a pregnant woman is diagnosed with a malignant tumor, serious medical, ethical, emotional, religious, and philosophical dilemmas arise [3]. Rhabdomyosarcoma is a rare event during pregnancy, a few cases have been described in the literature to date [3]. Our patient was 19 years old and the diagnosis was

made in the 3rd trimester of pregnancy, which is consistent with studies conducted in Saudi Arabia (19 years out of 32 weeks), Brazil (29 years out of 33 weeks), the United States (18 years out of 27 weeks), and another in Mexico (18 years out of 28 weeks) [1, 4, 6, 7]. This can be explained by a delay in consultation by them and by a diagnostic error of the nursing staff. Clinical examination reveals a painful endooral swelling accompanied by bleeding and dysphagia. Wafa *et al.*, find similar signs [4]. Computed tomography of the facial mass is the diagnostic orientation examination, although not recommended throughout pregnancy, it can be prescribed in the third trimester of pregnancy, unlike Magnetic Resonance Imaging which is prohibited in the first trimester of pregnancy but is recommended from the positive diagnosis was made using an incision biopsy followed by an anatomo-pathological examination, which and the confirmatory examination. Ofer Merimsky *et al.*, used the same technique for the diagnosis of their tumor [3]. Histological evidence remains the only means of diagnosing cancer. In our case, the treatment consisted of radiotherapy, followed by surgery. Radiation therapy should be started when the tumour is near the meninges or has intracranial or spinal cord extensions [4]. But it must take into account gestational age because high doses of radiation have a malformative power, especially before 26 weeks of gestation, and remain present after 27 weeks of pregnancy [10, 11]. This decision to start with radiotherapy is contrary to some authors who began their treatment with first surgery followed by radio/chemotherapy [1]. This is because the size of the tumor is not invasive in their Meinolf S *et al.*, reports the case of an 18-year-old patient with rhabdomyosarcoma in pregnancy of 27 weeks whose low-dose oral chemotherapy produced a highly effective anti-tumor response without associated adverse side effects in the mother and child [1]. This is not the case for Meazza *et al.*, whose personalized treatment with low doses of intravenous chemotherapy and alternating cycles every week for the treatment of a pregnant woman until birth will lead to the death of the patient after the delivery of a healthy child [5]. Therefore, chemotherapy, despite its toxicity to the fetus, can allow the continuation of a pregnancy.

CONCLUSION

Rhabdomyosarcoma is a very aggressive malignant tumor that is rare during pregnancy. The

histological evidence is valid to make the diagnosis. There is no consensus for the best medical-surgical decision. The choice of treatment should take into account the age stage.

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