

The Palliative Management of A Cancer Patient With Giant Retinoblastoma of The Left Eye

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Abstract

We report of a young African child with a giant retinoblastoma originating from the left orbital space. The mother and the child left Cameroon seeking medical support at the Department of Pediatrics. To date of arrival, the extensive tumor was exulcerating and not curable. Only palliative support was possible.

Keywords: Giant-Retinoblastoma-Child; Pediatrics; Extensive Tumor

Introduction

Retinoblastoma is a rare tumor in children that finds his origin in retina tissue and counts for about 3% of the cancers occurring in children younger than 15 years. The incidence counts as 4 per 106 children. It occurs at any age, it most often occurs in younger children, usually before the age of 2 years. 95% of cases are diagnosed before the age of 5 years. Unilateral and bilateral involvement is possible. Bilateral retinoblastoma is still hereditary. Unilateral forms of retinoblastoma are present in 60% of cases and hereditary in 10% of cases. The prominent symptoms are leucocoria, strabismus or a red, painful eye. Early detection of retinoblastoma is important for the chance of survival, the visual prognosis and preservation of the eye. The

choice of treatment is based on the risk of metastases, the diameter and the location of the tumour, the age of the patient, the heredity and the visual prognosis. Nowadays, treatment more often consists of a combination of techniques. Small tumors (diameter and thickness < 2 mm) in the center of the retina can be treated with laser therapy and those in the peripheral retina by cryotherapy. Small to medium-sized tumors (<8mm diameter) can be treated with thermo chemotherapy: systemic chemotherapy and laser hyperthermia or with adjuvant laser therapy or brachytherapy. Medium-sized tumors (< 8 mm thick) can be treated with just brachytherapy, sometimes preceded by chemoreduction. Enucleation is carried out when a large tumor fills over half of the

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globe; often this is the only possible treatment. Giant retinoblastomas are rarely reported [3,4] in the literature and most often found in developing countries with low medical standard.

Case Report

We report of a 2 years-old African male child primary operated for retinoblastoma of the left eye in September 2002 at the Presbyterian Eye Hospital Baffousam in Cameroon. Enucleation surgery was the treatment of choice. A postoperative chemotherapy with endoxane was performed postoperatively for 4 months. The mother arrived seeking for help and medical support. She attended the Department of Pediatrics the same day. The tumor, extending over the whole left region of the face, originating from the left orbital space. Computer tomography revealed a disseminated infiltration of the tumor into the left supraclavicular region. After oncologic judgement, second chemotherapy block or surgical removal of the tumor was no curative therapy option anymore. The mother was informed about the incurability of her child. Palliative support was given by a multidisciplinary approach with oncologists, pediatric surgeons and nurses. The child was hospitalized at a special unit, at which the staff is specialized on wound management. Daily local treatment of the exulcerating tumor with alginate, carbon and metronidazole formentations and sodium chloride solutions was performed to prevent the decomposition and necrosis of the tumor. A small apartment was organized for them and the child was checked weekly at our ambulatory. To date of publication the child is well and attends the hospital weekly for control.

Discussion

The survival rate of giant retinoblastoma is 90 per cent in reference centers [1]. New strategies are part of the research. Surgical enucleation is performed in starting point of any medical management until the advent of radiotherapy was completely finished. Early detected, focal therapies such as photocoagulation, cryocoagulation, and radioactive applicators can open a new concrete treatment options of targeted tumor treatment. Different forms of chemotherapy have shown successful results and are currently under further intensive research: chemoreduction to make large tumors more manageable and enable less fulminant treatment of tumors located in delicate sites, thermochemotherapy uses the heat on plasma membrane permeability to antimetotics, and chemotherapy associated with cyclosporine to reduce the multidrug resistance of retinoblastomal tumors [2]. The aim is avoiding primary enucleation of the tumor and external beam radiation as soon as possible. Local chemotherapy, hyperthermia treatment, and dynamic phototherapy treatment, proton beam radiotherapy also has promising aspects in treating retinoblastoma.

Palliative care is an approach which improves the quality of life of patients and their families facing life-threatening illness, through the prevention, assessment and treatment of pain and other physical, psychosocial and spiritual problems. Positive influence on the patients' behaviour may also positively influence the course of illness. In our case the organization of an overall palliative support was necessary. Later, this support was given in an ambulatory way. The

mother denied going back to Cameroon and no curative treatment for her child was possible to date of attending our hospital.

The child attended the hospital weekly for control giving the best palliative ambulatory support that was possible.

References

1. Sanders BM, Draper GJ, Kingston JE. Retinoblastoma in Great Britain 1969-80: incidence, treatment, and survival. *Br J Ophthalmol.* 1988; 72(8):576-83.
2. Seregard S, Lundell G, Svedberg H, Kivela T. Incidence of retinoblastoma from 1958 to 1998 in Northern Europe: advantages of birth cohort analysis. *Ophthalmology.* 2004; 111 (6): 1228-32.
3. Massey GV, Pedigo S, Dunn NL, Grossman NJ, Russell EC. Continuous lidocaine infusion for the relief of refractory malignant pain in a terminally ill pediatric cancer patient. *J Pediatr Hematol Oncol.* 2002; 24 (7): 566-8.
4. Belkina BM, Durnow LA, Poliakov VG, Goldobenko GV, Glekov IV, Ushakova TL. Treatment modalities and results of comprehensive therapy in extended retinoblastoma in children. *Vopr Onkol* 1997; 43 (4): 435-9.