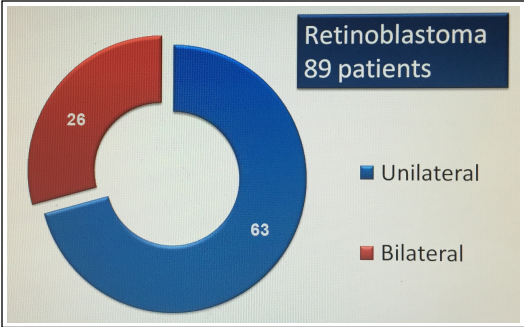


Introduction

Report our experience in superselective intra-arterial chemotherapy (SIAC) for advanced intraocular retinoblastoma and determinate if it is possible and safe to deliver the drug in the choroidal crescent.

Methods

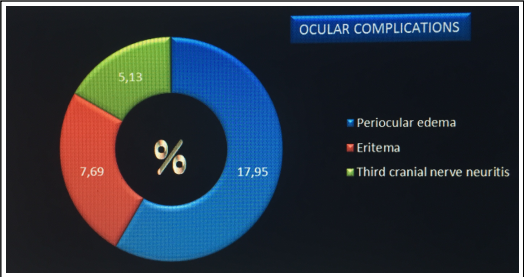
From 2010 to 2014, a total of 115 eyes of 89 patients with unilateral (n:63) and bilateral (n:26) advance intraocular retinoblastoma were treated. Mean age was 24 months (range 6-81, 55% women). We used direct OA micro-catheterization and if it was not possible or there was inadequate visualization of the choroidal crescent, alternative routes including the orbital branch of the MMA or the TSA were performed. The chemotherapies used were: melphalan, topotecan, and/or carboplatin. The main outcome measures were: procedural success and ocular and systemic complications.



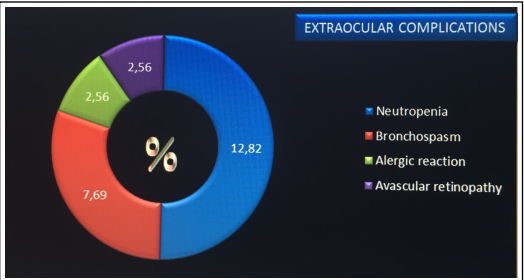
Results

There were 364 chemotherapy procedures. Delivering the drug in the choroidal ophthalmic blush was successful in 97,93% of procedures. Treatment routes included: 239 sessions of direct OA, 123 in MMA and only 2 TSA. Mean number of infusions was 3.8 per patient (range 1-14). Transient ocular complications were: 7 eyes with periocular edema, 3 eritema of the frontal skin and 2 third cranial nerve ipsilateral neuritis. Reversible extraocular occurrences were: 3 bronchospasms, 1 allergic reaction to iodinated contrast and 5 significant neutropenia. One permanent complication was observed: avascular retinopathy. All children are alive.

OCULAR COMPLICATIONS



EXTRAOCULAR COMPLICATIONS

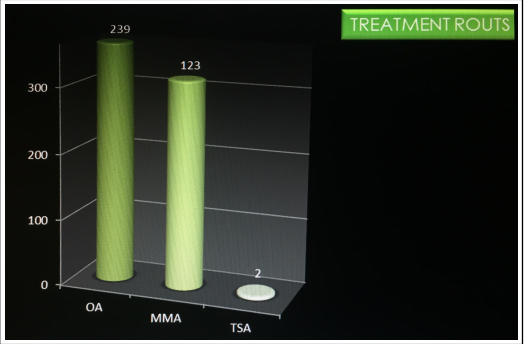


IAC Challenging

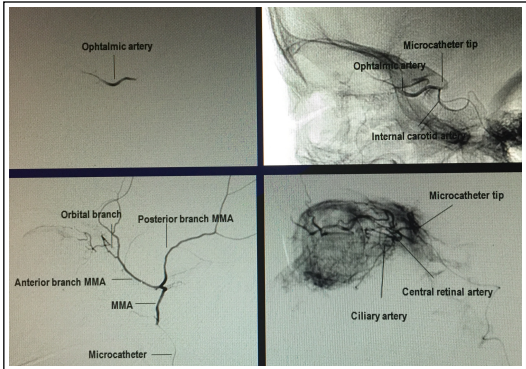
- Femoral Puncture (3 Fr arterial sheath)
- Tortuos Vessels
- Superselective Micro-Catheterization OA
- Stability during infusion (pulsatile technique :1 ml / min)
- Chemo- Reduction

TREATMENT ROUTES

Ophthalmic Artery : **OA**
Midle Meningeal Artery : **MMA**
Temporal Superior Artery : **TSA**



ANATOMY ASPECTS



Conclusions

Our experience demonstrate that SIAC delivery in the choroidal crescent is possible and safe, even in complex anatomy and when direct OA catheterization was not an option.

Learning Objectives

To improve the knowlegde in superlective cateterization of the ofthalmic artery

References

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