

10 -YEAR REVIEW OF RETINOBLASTOMA CASES AT PORT MORESBY GENERAL HOSPITAL (2014- 2024)

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INTRODUCTION

- Retinoblastoma is defined as a rare tumor of childhood that arises from the retina.
- Global Incidence of- 1/15000 live births.
- No PNG data, however unpublished study by Dr Daur(2018) showed that 18% of cases admitted to PMGH were due to retinoblastoma.
- In high income countries (HIC), survival and visual outcomes of retinoblastoma patients has improved dramatically with early diagnosis and treatment.
- Preserving life over sight is still the main aim of treatment in low and middle income countries (LMIC)where most children have advanced disease on presentation.

⁴ Meel,et al.: Advances in Retinoblastoma 2012

AIM

The aim of this study is to review

1. The clinical presentation of retinoblastoma cases to PMGH.
2. Establish the extent of the disease on presentation.
3. Survival rate to treatment completion.

METHOD

Study site

- PMGH pediatric ward 1E

Study design

- A descriptive retrospective

Study period

- June 2014-June 2024

Sample size

- 27 cases charts

Data Collection:

- Pediatric hospital charts

Data Analysis;

- Excel spread sheet

METHOD-SELECTION CRITERIA

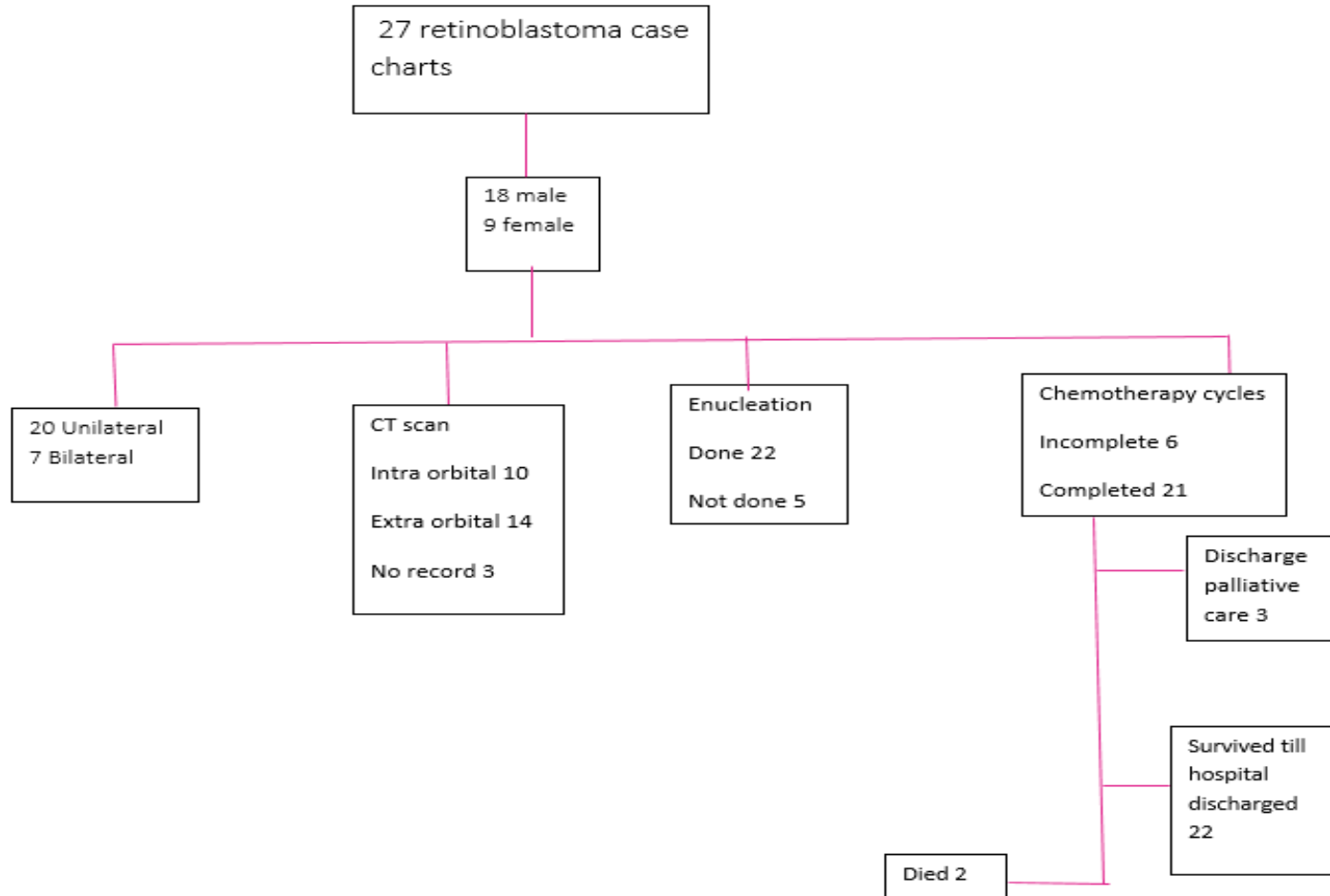
Inclusion criteria

- Children transferred & admitted to ward 1E with retinoblastoma(2014-June 2024)

Exclusion criteria

- Children diagnosed before 2014
- Children with eye conditions apart from retinoblastoma
- Charts for retinoblastoma not locate

FLOW CHART

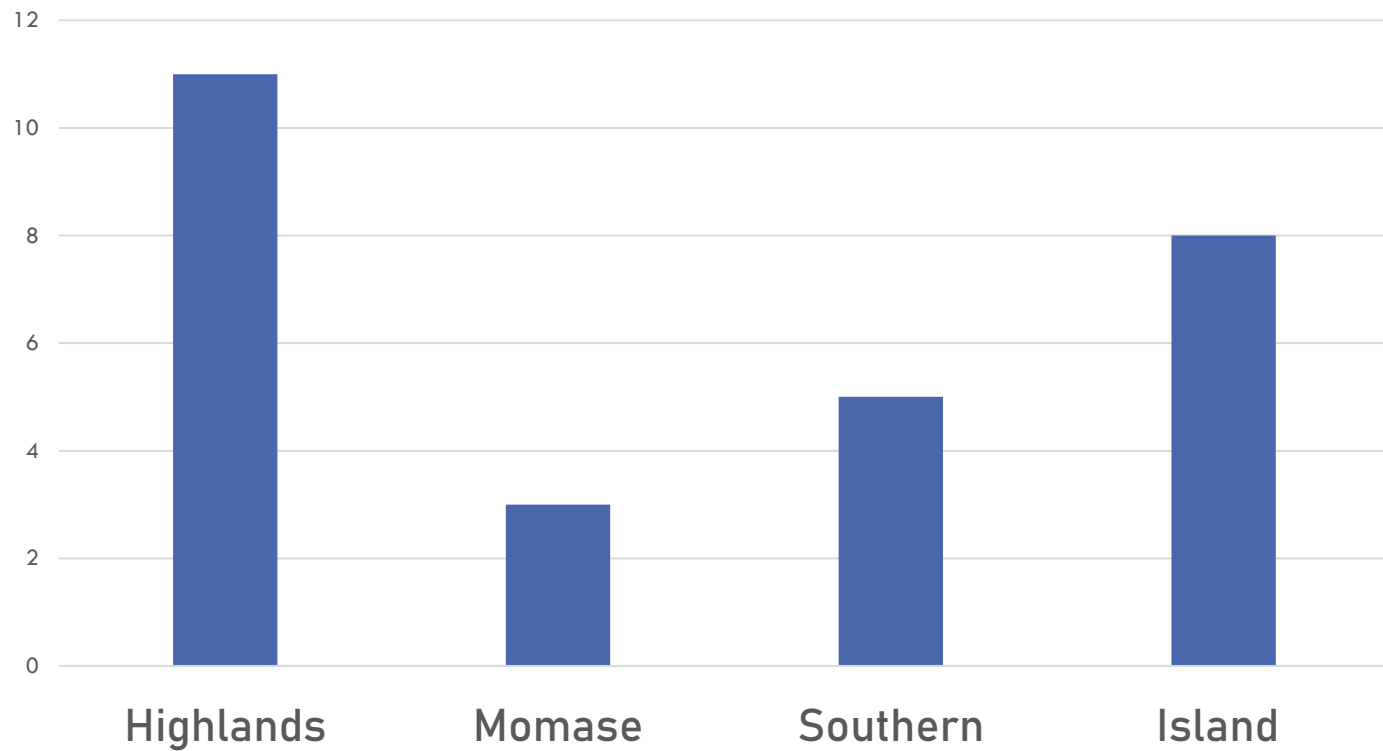


RESULTS

Variable	Results
Male. n (%)	18 (66.67%)
Female. n (%)	9 (33.33%)
Age range in years	1-5
Median age in years. Median (IQR)	4 (2.58-4)
Average time to make a diagnosis (presentation to diagnosis) (months)	7.56 months
Average time to administer the treatment (Presentation-Treatment)	Mean 5.1 months
Average time to discharge (Presentation - Discharge)	Mean 5.74 months

RESULTS

Table 2: Home regions of patients with retinoblastoma .



RESULT

Affected eye	Number of cases	Percentage
Unilateral	20	74%
Bilateral	7	26%

Cases	Leucocoria	Eye growth	Protrusion	Eye redness	Ocular pain	Vision loss	Post enucleation	Sore eye	Eye injury
1		1			1				
2		1	1			1			
3	1		1		1		1		
4		1	1						
5		1	1		1				
6			1			1			
7	1								
8	1		1	1	1			1	
9							1		
10		1	1		1	1			1
11	1								
12		1	1						
13		1	1		1			1	
14	1	1	1				1	1	
15	1								
16		1	1			1			
17			1	1	1			1	
18		1	1	1					
19							1		
20		1	1		1	1			
21	1		1	1	1			1	
22		1	1			1			
23	1	1	1						
24		1		1	1				
25			1			1			
26	1	1				1			
27	1	1	1		1				
TOTAL	10	16	19	5	11	8	4	5	1

RESULTS: CT AND ENUCLEATION

CT scan	Number of cases	Percentage
Extra orbital	14	51.9%
Intra orbital	10	37.0%
No records	3	11.1%

Enucleation	Number of cases	Percentage
Done	22	81.5%
Not done	5	18.5%

RESULT

Chemotherapy cycles	Number of cases	Percentage(%)
Complete	21	77.8%
Incomplete	6	22%

Hospital outcome	Number of cases	Percentage(%)
Discharged	22	81.5%
Palliative discharge	3	11.1%
Died	2	7.4%

DISCUSSION

- Study done by Global retinoblastoma, assessing the presentation of retinoblastoma cases from high income countries (HIC) with low-income countries (LIC) shows that HIC diagnosed intraocular retinoblastoma and were cured while LIC their presentation is late and have advanced and metastasis.
- HIC tumor diagnosed confined to the eye, favorable prognosis, while in LMIC tumor spread beyond globe, poor prognosis.
- Study shows urgent need to improve detection and access to treatment in LMIC .

3. JAMA oncolo. Global retinoblastoma presentation

- From PMGH settings, the retinoblastoma cases with the presenting symptoms are late ,shows extra orbital metastasized
- The treatment of chemotherapy and enucleation ,are done, the patients who are discharged or repatriated to their referral hospital

LIMITATIONS

- Missing data, no charts available
- Repatriated cases not followed up
- Investigations done not documented

CONCLUSION

This study has shown that:

- The commonest presentations were protrusion of the eye (66%), eye swelling (50%) and eye pain (40%).
- 51% of patients had extra orbital tumor extension on admission.
- 77% patient of patients survived to the end of chemotherapy
- This, however, does not indicate long term survival.

RECOMMENDATIONS

- Improve training and early detection of retinoblastoma
- Improve proper health facilities for help and referral
- Encourage administration of chemotherapy in the other provincial hospital
- Improve referral pathways
- Multiple discipline approach
 - Early neonatal screening, part of neonatal examination
 - Ophthalmologist enucleation
 - Radiological investigation
 - Strengthen oncology services
 - Improving palliative services
 - Improve intra hospital follow ups Pediatric teams follow up on cases referred and/or repatriated
- Improving health promotion diagnosis

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