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EPIDEMIOLOGICAL AND CLINICAL DATA IN LOW AND INTERMEDIATE RISK NEUROBLASTOMA: A SINGLE INSTITUTION EXPERIENCE AND SURVIVAL OUTCOMES IN JERUSALEM.

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INTRODUCTION

Neuroblastoma has been the second most common solid tumour in children younger than 15 years of age, occupying 8% of all cancers, with an overall primacy to Leukaemia , brain tumours, lymphomas, respectively. Approximately, 130 new cases of cancer are identified each year per million children in the same age group.

AIM

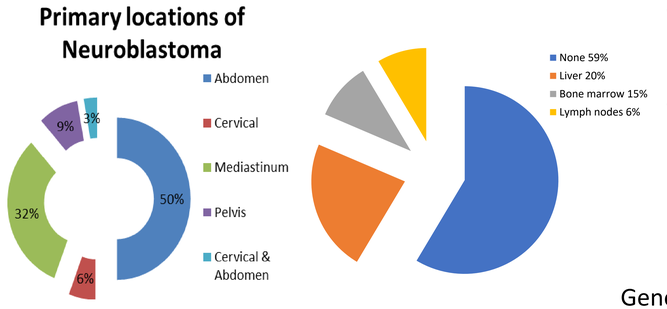
The aim of this study is to evaluate low and intermediate risk neuroblastoma patients' survival out-comes in Augusta Victoria hospital, Jerusalem between 2009 and 2018.

METHOD

This is a retrospective study of clinical and epidemiological data evaluating 34 eligible patients, treated at a paediatric hematology/oncology center with international protocols, using data from medical records.

RESULTS

With reference to the INSS system, 44% were classified as stage 3, 26% were stage 4 , 21% were stage 4s, 9% were stage 1 and 0% are stage 2. **According to the risk stratification, 29 patients were an intermediate risk (85%), and 5 low risk (15%)[6].** Looking at the outcome based on the risk stratification, the low risk NB group had a 100% survival rate. Whilst the intermediate risk NB group, it has a 93.1% survival rate. Two mortality cases were encountered, both were intermediate risk neuroblastoma



Primary locations of neuroblastoma. Figure 1.

Sites of Neuroblastoma metastasis . Figure 2.

MYCN amplification study was done on 24 patients (71%), all were nonamplified, the rest are considered as unknown biological feature. Urine for vanillylmandelic acid is tested in 22 cases (65%) of all individuals , it outstanded as elevated in 14 patients (41%), and not elevated in 8 patients (24%). Lack of fund persisted as an obstacle in completing the MYCN amplification test and urine for VMA for the later patients, as those two tests are done at another hospital.

General acute complications among the management were acute infections as yeast sepsis or bacterial sepsis. The long term complications observed due to tumor effect were Horner syndrome, scoliosis and poor growth and permanent lower limb paralysis.

CONCLUSIONS

The outcome and prognosis of low risk and inter-mediate risk Neuroblastoma is excellent as in de-veloped countries, more attention and medical awareness for early detection and treatment of IR neuroblastoma to minimize severe long term tumour morbidities in these groups is crucial.

REFERENCES

1. Davidoff, Andrew M. “Pediatric Oncolo-gy.” Seminars in pediatric surgery 19.3 (2010): 225–233. [PubMed: 2914477]
2. Ward, E., DeSantis, C., Robbins, A., Kohler, B., & Jemal, A. (2014). Childhood and adolescent cancer statistics, 2014. CA: A Cancer Journal for Clinicians, 64(2), 83–103. [PubMed: 24488779]
3. 3. Fisher J.P.H., Tweddle D.A. Neonatal neuroblastoma. Seminars in Fetal and Neonatal Medicine, (2012) 17 (4) , pp. 207-215.
4. Cheung NK, Dyer MA. Neuroblastoma: devel-opmental biology, cancer genomics and immu-notherapy. Nat Rev Cancer. 2013; 13:397–411. [PubMed: 23702928]
5. Atsuko Nakazawa, Chizuko Haga, et al. Correla-tion between the International Neuroblastoma Pathology Classification and genomic signature in neuroblastoma, Cancer Sci. 2015 Jun;106(6):766-71. [PubMed: 25827934].

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