BEYOND IMAGE DEFINED RISK FACTORS (idrfS): A Delphi survey Highlighting definition of the Surgical Complexity Index (SCI) in Neuroblastoma

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Abstract

BACKGROUND Preoperative evaluation of Image Defined Risk Factors (IDRFs) in neuroblastoma (NB) is crucial for determining suitability for upfront resection or tumor biopsy. IDRFs are linked with a higher potential morbidity at operation and lessen the chance of complete tumor resection. The IDRFs do not all carry the same weight in predicting tumor complexity and surgical risk. In this study we aimed to assess and categorize the degrees of surgical complexity (Surgical Complexity Index, SCI) in NB resection. PROCEDURE A panel of 15 surgeons was involved in an electronic Delphi consensus survey to identify and score a set of shared items predictive and/or indicative of surgical complexity, including the number of preoperative IDRFs. Risk categories included - (a) Standard risk; (b) Moderate risk; (c) High risk; (d) Very high risk. A shared agreement included the achievement of at least 75% consensus focused on a single category or, alternatively, on the sum between the prevailing category and an immediately closest one. RESULTS After 3 Delphi rounds, agreement was established on 25/27 items (92.6%). A severity score was established for each item ranging from 0 to 3 with an overall SCI range varying from a minimum score of zero to a maximum score of 29 points for any given patient. CONCLUSIONS A consensus on a SCI to

stratify the risks related to tumor resection was established by the panel experts. This index will now be deployed to critically assign a better severity score to IDRFs involved in NB surgery.

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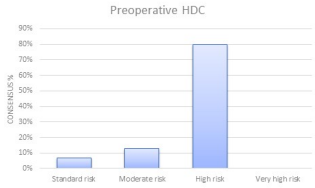

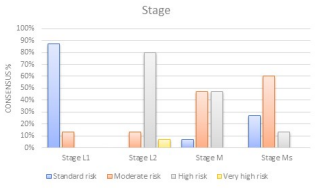

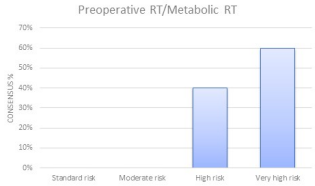

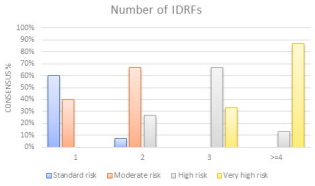

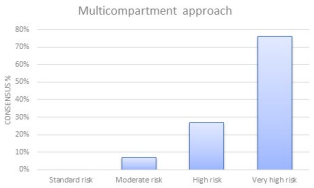

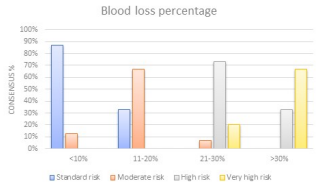

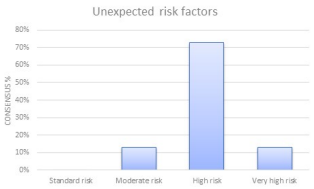

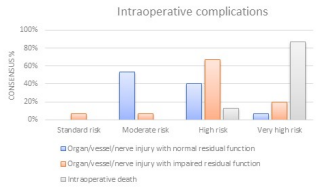

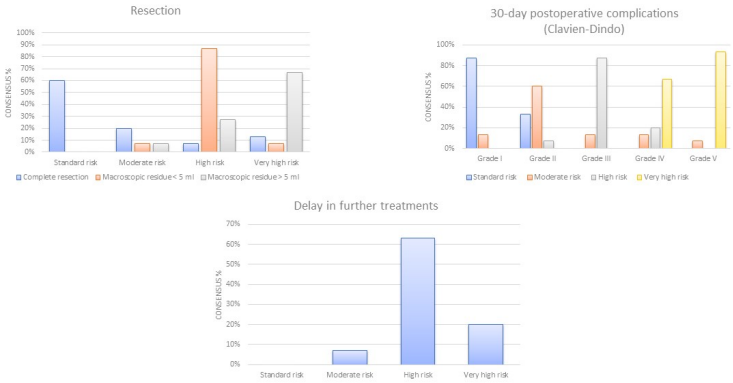

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