

## **Validation of the Screening Tool for the Assessment of Malnutrition (STAMP) in patients with Spinal Cord Injuries (SCI)**

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The prevalence of childhood malnutrition lies between 15 and 30% in hospital practice<sup>(1,2)</sup>, it may be higher still in neuro-disabilities patients such as those with spinal cord injuries (SCI). A number of paediatric nutrition screening tools (PNST) has been developed<sup>(1,2)</sup> but their use in the SCI population requires further investigation. The aims of the present study was to validate the Screening Tool for the Assessment of Malnutrition (STAMP)<sup>(1)</sup> in paediatric patients with SCI. On admission, children were screened by this tool by the nursing staff. Its validity was assessed by (i) comparison with dietetic assessment (criterion validity); (ii) comparison with another generic PNST: the Paediatric Yorkhill Malnutrition Score<sup>(2)</sup> (PYMS) (concurrent validity); and (iii) completion of an additional STAMP screening was completed by the research dietitian to assess inter- and intra-rater reliability. The levels of agreement were assessed using Cohen's  $\kappa$ -statistics<sup>(3)</sup>. Fifty-one children were screened. The prevalence of undernutrition risk was 42.1%. STAMP had moderate agreement with dietitian assessment ( $\kappa$ : 0.578, 95% CI:0.304–0.851) and fair agreement with PYMS ( $\kappa$ : 0.314, 95% CI:0.08–0.552). The STAMP had substantial reliability (inter-rater reliability:  $\kappa$ : 0.752, 95%CI: 0.568–0.935; intra-rater reliability:  $\kappa$ : 0.635, 95% CI: 0.392–0.878). When compared with dietetic assessment, STAMP was numerically (but not significantly) less sensitive (70.6% v 76.4%), and less specific \*87.5% v 93.7%), and it had weaker agreement than PYMS ( $\kappa$ : 0.58 v 0.69). Although it is possible that the diagnostic accuracy is lower than that of other generic PNSTs, STAMP is probably still an acceptable tool for the identification of SCI children at risk of under-nutrition. Further investigation is warranted to test its predictive validity.

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