Diagnostic accuracy of PG-SGA SF, MUST and SNAQ in patients with head and neck cancer

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Aim
We aimed to assess diagnostic accuracy of the PG-SGA SF, Short Nutritional Assessment Questionnaire (SNAQ) and Malnutrition Universal Screening Tool (MUST), in patients with head and neck cancer, at the University Medical Center Groningen, The Netherlands.

Conclusion
In patients with head and neck cancer, the PG-SGA SF shows good diagnostic accuracy, whereas sensitivity of the MUST and SNAQ are poor in this patient population. Utilizing the PG-SGA SF facilitates accurate identification of malnutrition and its risk factors in head and neck cancer patients.

Methods
- Cross-sectional study
- 78 patients with head and neck cancer
- Malnutrition risk was assessed by PG-SGA SF, MUST, and SNAQ
- Low or medium malnutrition risk was defined as: PG-SGA SF = 0-8 points; MUST = 0-1 points; SNAQ = 0-2 points
- High malnutrition risk was defined as: PG-SGA SF ≥9 points; MUST ≥2 points; SNAQ ≥3 points
- Nutritional status was assessed by the using Dutch version of the full PG-SGA, v3.7 (based on the original English PG-SGA ©FD Ottery, 2005, 2006)
- Malnutrition was defined as PG-SGA Stage B (moderately or suspected malnutrition) or Stage C (severely malnourished)
- Diagnostic accuracy was assessed by calculating sensitivity, specificity, and positive and negative predictive value

Table 1. Diagnostic accuracy of PG-SGA SF, MUST and SNAQ

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<tr>
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<th>PG-SGA SF</th>
<th>MUST</th>
<th>SNAQ</th>
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<tbody>
<tr>
<td>Sensitivity</td>
<td>0.73</td>
<td>0.40</td>
<td>0.40</td>
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<tr>
<td>Specificity</td>
<td>1.00</td>
<td>0.92</td>
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<tr>
<td>Positive predictive value</td>
<td>1.00</td>
<td>0.75</td>
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<tr>
<td>Negative predictive value</td>
<td>0.86</td>
<td>0.71</td>
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Background
The Patient-Generated Subjective Global Assessment Short Form (PG-SGA SF; ©FD Ottery) is a screening instrument to identify malnutrition and its risk factors in clinical populations. The PG-SGA SF includes 4 Boxes: 1. Weight 2. Food Intake 3. Symptoms 4. Activities and Function

Results
Prevalence of high malnutrition risk was 28%, 21% and 21% according to PG-SGA SF, MUST and SNAQ, respectively. According to the full PG-SGA, 39% of the patients were malnourished. Results on diagnostic accuracy are shown in Table 1.

References

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