# (dmj) ORIGINAL ARTICLE

# Face validity and inter-rater reliability of the Danish version of the modified Yale Preoperative Anxiety Scale

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# INTRODUCTION

Preoperative anxiety is common in children and it is associated with an adverse postoperative outcome. The modified Yale Preoperative Anxiety Scale (m-YPAS) was developed to assess preoperative anxiety in children. The purpose of this study was to translate and adapt the m-YPAS to Danish cultural and linguistic conditions and to test its face validity and inter-rater reliability in a clinical setting.

### **MATERIAL AND METHODS**

Translation was done in accordance with the WHO guidelines. Face validity and linguistic challenges were resolved in a focus group with five nurse anaesthetists. Inter-rater reliability for the subscales in the m-YPAS was determined at two different time points by using weighted kappa ( $\kappa_w$ ) statistics, whereas agreement on the overall weighted scores was calculated using the intraclass correlation coefficient (ICC). The interrater reliability test was done by a paediatric anaesthesiologist consultant, a psychiatrist and the first author.

### RESULTS

The Danish version of the m-YPAS was considered suitable and its face validity was satisfactory. Inter-rater reliability analysis revealed that inter-observer agreement among three independent raters was good (induction 1:  $\kappa_w$ : 0.63-0.98, ICC = 0.92; induction 2:  $\kappa_w$ : 0.72-0.96, ICC = 0.92).

# CONCLUSION

Standardised and validated assessment tools are needed to evaluate interventions to reduce preoperative anxiety in children. A Danish version of the m-YPAS now exists, and preliminary testing has demonstrated a satisfactory face validity and inter-rater reliability.

**FUNDING:** the study was supported by grants from TrygFonden (Grant number: j.no.7-11-1292).

TRIAL REGISTRATION: see www.danmedj.dk.

CORRESPONDENCE: Pernille Skovby. E-mail: pernisko@rm.dk CONFLICTS OF INTEREST:see www.danmedj.dk REFERENCE: Dan Med J 2014;61(6):A4853 FROM: see www.danmedj.dk dmj) ORIGINAL ARTICLE

# An interferon-gamma release assay test performs well in routine screening for tuberculosis

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## INTRODUCTION

A positive interferon-gamma release assay (IGRA) is regarded as proof of latent *Mycobacterium tuberculosis* infection. We conducted an evaluation of the IGRA test "T-SPOT.TB" to test its performance during clinical routine use by analysing the positivity rate and odds, effect of season and sensitivity.

### **MATERIAL AND METHODS**

Data from T-SPOT.TB testing together with age and test indications (anti-tumour necrosis factor alpha (TNF $\alpha$ ) candidate, contact investigation or suspicion of tuberculosis (TB)) were combined with mycobacteria culture results.

## RESULTS

A total of 1,809 patients were tested. Conclusive results were achieved for 1,780 patients (98.4%). Among these, 4.6% of anti-TNF $\alpha$  candidates, 19.3% of contacts and 24.4% of TB suspects tested positive. Compared with anti-TNF $\alpha$  candidates, the odds for a positive result were significantly higher for contact investigations (odds ratio (OR), mean (95% confidence interval): 4.93 (3.11-7.81)) and TB suspects (OR: 6.83 (4.33-10.77)). Elevated odds of an inconclusive test were found during autumn and winter periods (OR: 2.53 (1.58-4.05)) and for patients > 75 years of age (OR: 2.66 (1.43-4.94)) and < 6 years of age (OR: 3.35 (1.58-7.09)). In all, 41 of 43 culture-verified *M. tuberculosis* infections tested positive with one false negative.

### CONCLUSION

During routine testing, inconclusive tests were rare, but more frequent during autumn/winter periods and for patients < 6 and > 75 years of age. The T-SPOT.TB showed a high sensitivity in culture-verified TB, although false negative results did occur.

FUNDING: not relevant.

### TRIAL REGISTRATION: not relevant.

CORRESPONDENCE: Allan Vestergaard Danielsen. E-mail: alladani@rm.dk CONFLICTS OF INTEREST: none. Disclosure forms provided by the authors are available with the full text of this article at www.danmedj.dk REFERENCE: Dan Med J 2014;61(6):A4856 FROM: 1) Department of Respiratory Medicine and Allergology, Aarhus University Hospital, 2) International Reference Laboratory of Mycobacteriology, Statens Serum Institut