



Service Development Initiative – Screening, Induction Assessment and Follow-up in Support of Procedure Induced Anxiety Management Services

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Introduction

Peri-operative anxiety is associated with adverse clinical outcomes and significant psychological morbidity in the majority of patients following discharge

Validated screening tools can be used peri-operatively to highlight children who may benefit from preventative therapeutic intervention to reduce psychological morbidity

Aim

To confirm positioning and efficacy of validated anxiety screening tools at three points in the patient peri-operative pathway; pre-assessment, induction and following discharge

Research and Ethics

The HRA and GOSH Research and Governance Department confirmed this project as a service development initiative and so did not need review by an NHS Research Ethics Committee

Method

99 admissions scheduled for ENT surgery May – October 2019

Demographic data, previous negative experience of anaesthesia or surgery and requirement for pre-medication was recorded

Pre-assessment – Parents scored themselves and child’s anxiety using the Visual Analogue Scale (VAS) (0–100 mm). Children scored themselves if they were able to.

Induction – Anaesthetists assessed children’s anxiety at induction using the Induction Compliance Checklist (ICC).

Follow up – Post Hospitalisation Behaviour Questionnaire (PHBQ) assessed behaviour change at 3 month follow up

Validated Anxiety Screening Tools

VAS



ICC

Induction compliance checklist
Crying, tears in eyes
Turns head away from mask
Verbal refusal, says ‘no’
Verbalization indicates fear or worry
Pushes mask away with hand
Covers mouth/nose with hands/arms
Hysterical crying
Kicks, flails legs/arms, arches back
Requires physical restraint
Complete passivity

PHBQ

Results

Demographics

Mean age 5.2 years (2-16 years)
49% male / 51% female

Data capture

6 cases cancelled or postponed leaving a total of 93

Assessment Tool	Percentage Captured
VAS Parent	99/99 (100%)
VAS Child	55/99 (56%)
VAS Parent assessment of child	99/99 (100%)
ICC	93/93 (100%)
PHBQ	75/93 (81%)

VAS scores

In line with published research, VAS \geq 40mm = severe anxiety

42% of children who completed a VAS were anxious
61% of parents were anxious. 59% scored their children anxious
Children with previous negative experiences had higher VAS scores

ICC

Threshold \geq 4 = severe anxiety
Scores uniformly low – 12% scored \geq 4

PHBQ

51% of children exhibited negative behavioural changes post-operatively at 3 months
Categories most frequently reported ‘separation anxiety’ and ‘sleep disturbance’
Child’s VAS score \geq 4 at pre-assessment was predictive of negative behavioural changes 52% versus 21% VAS \leq 4. $p = 0.05$

Conclusion

This shows the feasibility of utilising VAS scores at pre-assessment to highlight anxious children at risk of behaviour disturbance

This can identify children who will benefit from pre-operative preparation and may require post-operative behavioural support

PHBQ is effective at measuring post-op psychological disturbance

References

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