Nottingham University Hospitals MHS Trust



Quantifying the impact of surgical scars following anterior lumbar spine surgery

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Background

The effects of surgical scars can be far reaching and life changing for many women. The emphasis placed on physical perfection by modern society means that scars can have a significant psychosocial impact¹. Understanding and quantifying the impact of scars is an important aspect of patient management, however, scar size or placement is not routinely considered as a prominent outcome for anterior lumbar spine surgery.



"I was told I would have a scar, but is it bigger than I thought"

"Emotionally feel disfigured, low self-esteem about body image"

"My scar is always covered by my clothing. I cannot bring myself to look at scar"

Methods

A postal questionnaire was sent to 188 women aged \geq 18 years of age who had undergone anterior lumbar spine surgery at Nottingham University Hospitals NHS Trust. Questionnaires were followed up via telephone after two weeks if no response had been received. The questionnaire included the Patient Scar Assessment Questionnaire (PSAQ)², a modified Female Sexual Function Index (FSFI), and questions relating to urinary and faecal incontinence. Descriptive statistics, chi square and Kruskal-Wallis tests were used to analyse the data. Exclusion criteria: spinal trauma. malignancy, scoliosis.

Results Responses were obtained from 122 women (64.9%). Five responses were excluded due to substantial missing data, giving a final response rate of 62.2% (n=117).

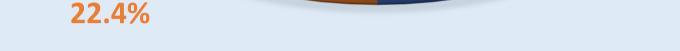


Figure 2 HOW NOTICABLE DO YOU THINK YOUR SCAR IS TO OTHERS?

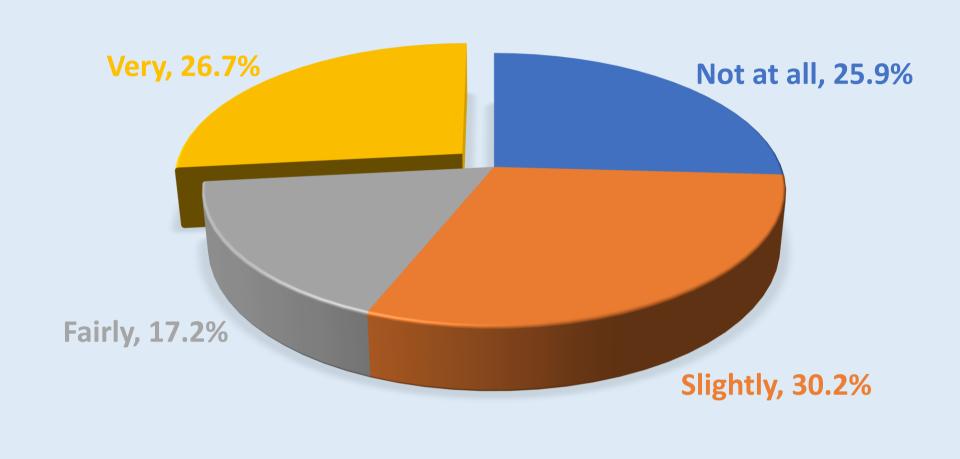


Figure 3 WHAT DO YOU THINK OF THE APPEARANCE OF YOUR SCAR? Very Poor, 6.9% Poor, 9.5% Excellent, 22.4% "I am quite embarrassed about my scar. It has caused self-confidence issues"

"Scar is not straight and quite wide and lumpy. It would be better for cosmetic reasons is it was in bikini line. I always try and hide my scar from my husband"

"Not really happy with appearance of scar – but could

Scar orientation was reported as vertical by 74.3% (n=84), although only 34.2% (n=39) of respondents would have chosen a vertical incision if they had been given the choice (p<0.01). Scar positioning was associated with perceived scar length (p<0.01), but not width, overall appearance, noticeability, or pain from the scar (p>0.05). Scar length was defined as 'long' or 'very long' by 72.8% (n=83) and 20.4% (n=23) stated that they were 'dissatisfied' or 'very dissatisfied' with the length of their scar.

Approximately 1 in 5 women (18.1% n=21) reported that they were very self conscious of the scar (Figure 1) and 26.7% (n=31) felt that their scar was very noticeable to others (Figure 2). Scar appearance was described as 'poor' or 'very poor' by 16.4% (n=19) (Figure 3), and 27.8% (n=32) reported that they were not satisfied with the appearance of their scar (length of scar p<0.05, width of scar p<0.001, flatness of scar p<0.01, lumpiness p<0.001, scar catches on things



Conclusions:

(e.g. clothes) p<0.01, self-noticeability p<0.001, noticeability to others p<0.001, self conscious of scar p<0.001).

Satisfaction with surgical outcome was associated with appearance of

the surgical scar (p<0.05), how troublesome scar symptoms were

(p<0.001), and how often the scar was thought about (p<0.005).

Annotations predominantly focused on the ease or ability to hide

scars as well as the impact of the scar on body image and sexual

relations. These are summarised in Figure 4.

Reported difficulties largely focused on aesthetics and impact on quality of life rather

than actual scar symptoms. Further research is required to establish prospective data

and patient perspectives on surgical scars and outcomes following lumbar spine

surgery. Holistic discussions are needed during pre- and post-operative consultations

to ascertain women's ideas, concerns and expectations regarding surgical scars as well

as to establish the actual and potential impact of surgical scars.

References

- 1. Brown, B and Moss, TP, McGrouther, DA. and Bayat, A (2010) Skin scar pre-conceptions must be challenged: Importance of selfperception in skin scarring. Journal of Plastic, Reconstructive & Aesthetic Surgery, 63 (6). pp. 1022-1029
- 2. Durani P, McGrouther DA, Ferguson, MW (2009) The patient Scar Assessment Questionnaire: A patient-reported outcomes measure for linear scars. Plastic and Reconstructive Surgery 123; 5 pp 1481-1489