**ABSTRACT**

**Introduction:** Caesarean section is an increasingly popular procedure in the UK with post –surgical adhesions cited as a major complication and the leading cause of secondary infertility in women. The use of transabdominal ultrasound for assessment of quality of scar tissue and adhesions following C-section is limited. This study’s aim was to determine the association between these surgical adhesions and perceived clinical symptoms.

**Method:** In this observational causative study, women that had undergone between 1-3 transverse lower-segment Caesareans were included.  Women with existing gynaecological conditions, who had undergone previous abdominal/pelvic surgery or who were pregnant were excluded. Two transabdominal ultrasound techniques were performed; visceral slide and adhesion criteria. Visceral slide facilitated dichotomisation into positive adhesions (<1cm movement) and negative adhesions (>1cm movement). Scar tissue quality of the Caesarean sample was assessed using patient and observer scar assessment scale (POSAS); these were scaled 1-10 over 6 scales and dichotomised into low (1-5) and high (6-10) quality. Clinical symptoms were collated with a questionnaire using numerical rating scales (NRS), 6 scales (0-10) were dichotomised into low (0-5) and high (6-10) categories. The relationship between adhesions and symptoms was explored using Fishers Exact test.

**Results:** Twenty-two participants aged 29-47 (mean 35.27(±5.37)) were recruited: 91% had 1 Caesarean; 4.5% had 2; 4.5% had 3 Caesareans. Reduced visceral slide was found to have an association with pelvic pain (p<0.043) and scar pain (p<0.004) within the study population. All other symptoms were not significantly associated with adhesion type.

**Conclusion:** Transabdominal ultrasound in the detection of post-operative Caesarean adhesions showed significant associations to aspects of pain symptomology. A comprehensive adhesion assessment needs to be developed to improve effective long term treatment and management of post-operative adhesions. The study design requires minor modification for validation and inter-rater reliability, before a larger scale study is indicated.