

Extreme obesity is not a barrier for robotic assisted surgery for endometrial cancer

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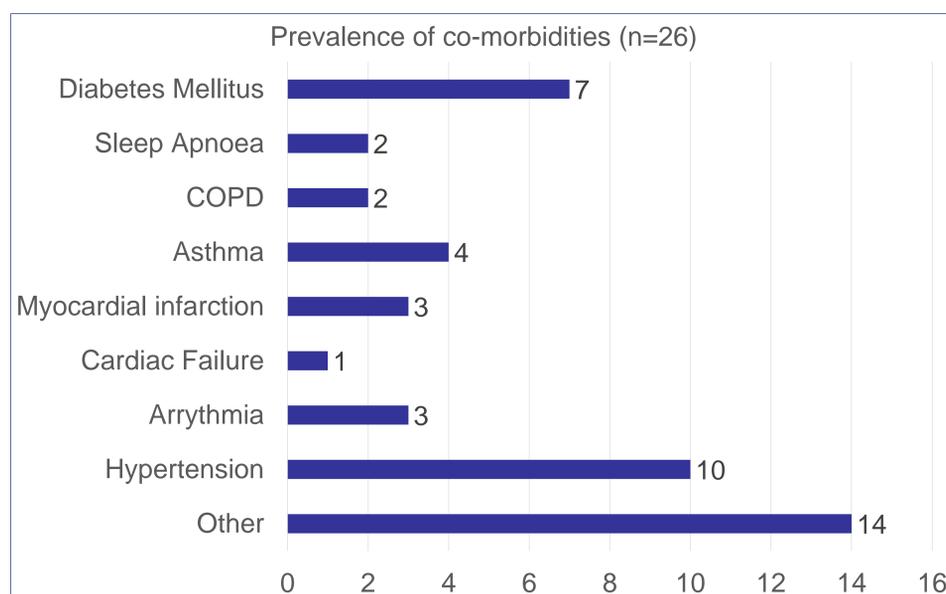
INTRODUCTION

Since the 1990s, rates of obesity in UK adults have increased from 15% to 28%, likely associated with the increase in uterine cancer incidence rates by 55%, with over 9400 new cases being diagnosed each year (CRUK). Several studies have established the feasibility as well as the benefits of robotic surgery in obese women. We evaluate the use of robotic surgery in extreme obesity.

METHOD

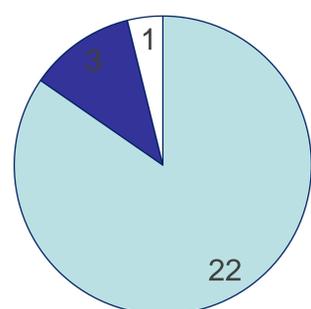
Prospectively collated database was reviewed for all women with body mass index ≥ 50 (BMI, kg/m²) undergoing robotic surgery for endometrial cancer between years 2007 and 2021. Patient demographics, disease characteristics and length of stay were analysed using descriptive statistics.

RESULTS



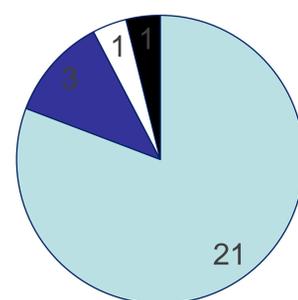
In total, 1028 robotic procedures were undertaken, of which 596 were for endometrial cancer. Of all endometrial cancers, 26 women had a BMI ≥ 50 . The mean age 62.4(SD 1.5), with a mean BMI of 54.9(SD 3.9). 92.3%(24/26) had additional comorbidities including cardiovascular 46.2% (12/26), diabetes 26.9% (7/26), obstruction sleep apnoea 7.7% (2/26) and previous laparotomy 11.5% (3/26). The average length of procedure was 101.9 minutes (SD3.6) Conversion to laparotomy undertaken in 19.2% (5/26) - 3 elective to retrieve large uterus; 2 reactive due to adhesions. Sentinel lymph node(SLN) sampling was attempted in 24.4%(9/26) and successful in 4/7 (44.4%). SLN was abandoned in the remaining 5, secondary to ventilation difficulties (n=3), bleeding (n=1) and inappropriate tracer injection (n=1). Stage 1 disease was confirmed in 84.6% (22/26). The average length of stay was 2.6days (SD 2.2).

Stage of disease (n=26)

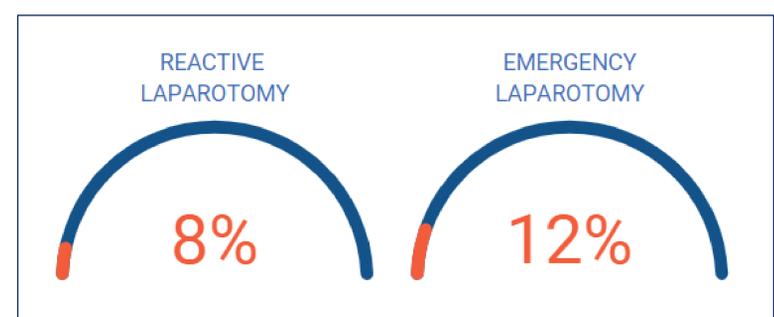


■ Stage 1 ■ Stage 2 □ Stage 3

Histological subtype (n=26)



■ Endometrioid ■ Serous
□ Clear Cell ■ Carcinosarcoma



CONCLUSION

Mean operating time

102 MINUTES



Mean length of stay

2.6 DAYS



In this highly selected group, robotic endometrial cancer surgery was successfully performed in 92.3%, with an average hospital stay of 2.6 days.

This report demonstrates that within an experienced multi-disciplinary team, robotic approach for endometrial cancer surgery is feasible in women with extreme obesity and is associated with low morbidity.