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Gynecology

Waiting for myomectomy during the COVID-19 pandemic: The vicious cycle of psychological and physical trauma associated with increased wait times

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Fibroids are the most common benign tumor of the female reproductive tract. Elective services have been suspended due to the COVID-19 pandemic, resulting in a backlog of patients awaiting surgery. When the curve was flattened in the UK, the second phase of the National Health Service's plan to tackle the pandemic was announced with the reintroduction of elective surgery.

Guidance emerged on how to prioritize patients based on urgency, taking into account the risk of surgery during the pandemic.¹ Most women needing surgery for fibroids fell into P3 or P4 categories,² defined as procedures that could wait for 3 months. The majority were from ethnic minorities due to greater prevalence of fibroids

among black women. East London has a diverse patient population: many women are from black, Asian and minority ethnic (BAME) backgrounds. BAME women are over four times more likely to contract, and be adversely affected by, SARS-CoV-2 than their white counterparts.³

Women whose fibroid surgery was postponed as a result of COVID-19 were identified using electronic patient records (n=22). Verbal consent was obtained for participation in the study at the time of completing the questionnaire, as written consent was not possible/appropriate amid the pandemic. Pre-COVID-19, women completed 'Uterine Fibroid Symptoms and Health-related Quality of Life Questionnaires' (UFS-QOL), a validated tool for assessing patients'

TABLE 1 Patient demographics (n = 22)

Age	30–45 (mean – 39)
Ethnicity	
Black	8 (36)
Asian	4 (18)
White	2 (9)
Other	8 (37)
Planned procedure	
Open myomectomy	5 (22)
Laparoscopic myomectomy	10 (45)
Myomectomy of unknown approach	2 (9)
Total laparoscopic hysterectomy	1 (5)
Total abdominal hysterectomy	3 (14)
Subtotal abdominal hysterectomy	1 (5)

Values presented as No. (%).

quality of life.⁴ Following the first peak, women completed a repeat UFS-QOL to assess the burden of delayed surgery. Pre- and post-COVID-19 UFS-QOL scores were compared.

Women's mental wellbeing was assessed using the Screening Questionnaire for Disaster Mental Health (SQD) score, which assessed SQD-P—post-traumatic stress disorder (PTSD) and SQD-D—depression. The interview-based questionnaire uses the DSM-IV screening criteria for PTSD and depression. This tool has good screening validity in situations akin to pandemics to assess mental health.⁵

We performed inferential univariate statistics to describe our dataset. All analyses were performed on SPSS v.25 (IBM, Armonk, NY, USA). Data were presented with median values and IQR for continuous variables. Due to sample limitations, analysis was performed using non-parametric associations. A *P* value <0.05 was considered statistically significant.

Twenty of the 22 patients were successfully contacted by telephone consultation. Patient demographics are summarized in Table 1, with ethnicities self-reported by patients. Of the twenty patients successfully contacted, four (20%) reported bleeding, three (15%) reported pressure, two (10%) reported pain, while 11 (55%) of the respondents described a combination of all the above. Unsurprisingly, none of the women reported that their symptoms had improved. Nine (45%) patients confirmed that their symptoms were stable, whilst 11 (55%) reported worsening of symptoms. The patients' perception of fibroid size was compared pre- and post-COVID-19 outbreak; 12 (60%) felt their fibroid/s had increased whilst the remaining eight (40%) felt no change.

SQD-P scores showed that four (20%) patients were 'slightly affected', one (5%) was 'moderately affected' and, sadly, 15 (75%) patients were 'severely affected'. SQD-D scores revealed that five (15%) patients were less likely to be affected by depression, whilst the vast majority, 15 (75%) patients out of 20, were more likely to develop depression.

Ethnicity is not a discriminative factor for depression or PTSD (*P*>0.05) as the vast majority of women from each ethnicity had similar SQD-D and SQD-P scores. All women within this cohort were

potentially susceptible to a decline in their mental health status. However, the severity of perceived symptoms from fibroids appeared to predispose patients to depression ($\rho=0.634$, $P=0.03$); if women felt they experienced 'all' symptoms there was a trend toward PTSD and depression, but this was not statistically significant due to small cohort sample. Perception of increased fibroid size led to higher scores of PTSD and depression ($\rho=702$; $\rho=707$, $P<0.05$).

Women most affected by the consequences of delayed surgery were predominantly from a BAME background. Not only were they victim to the effects of fibroids for longer durations due to cancellation of their surgeries, but they were also considered high-risk for the potentially life-threatening adverse effects of COVID-19. Ethnic minority status on risk assessment should not in itself be a reason to deny essential surgery.⁶

Our results suggest a significant proportion of women had worsening mental health status and increased fibroid size due to the postponement of planned surgery. This carries a higher symptom burden and reduces the possibility of minimally invasive intervention, thus increasing the potential risks of surgery. It is already well established that women with fibroids are at risk of suffering from problems pertaining to mental health, irrespective of COVID-19.⁷

In order to improve patient experience, we propose that measures be put in place within units (e.g. planned enhanced communication via virtual consultations) in order to assess changes in physical and mental health should we experience a 'second wave' of COVID-19. We also suggest assessing patients both physically and mentally when allocating priority to surgical intervention.

Our study demonstrates that women with fibroids can suffer significant psychological and physical sequelae due to delayed surgery. We encourage gynecologists looking after women with fibroids to continually re-evaluate the priority attached to 'routine' surgery for fibroids. In line with current guidance regarding COVID-19⁸ and SARS-CoV-2 PCR testing with its known limitations⁹, appropriately triaged women deserve to be operated on in a timely fashion. These women should not be thought of as less important, despite suffering from a benign rather than malignant diagnosis. Sadly, the effects from delay may increase the need for interim blood transfusions due to menorrhagia and result in a decline in mental health status, which may result in longer recovery overall. These delays, combined with a resultant growth in fibroid volume, may remove the possibility of a minimally invasive surgical approach.

During the first phase of the fight against this pandemic there was advice and guidance from international organizations regarding management of endometriosis¹⁰; however, no similar advice existed for women with uterine fibroids. During the "restoration" phase, it is hoped that adequate provision and planning will be considered for women with fibroids due to the findings of the present study, in addition to larger prospective studies, regarding waiting times and associated impacts on mental health.

AUTHOR CONTRIBUTIONS

SMS drafted the manuscript and performed data analysis. ZM performed telephone consultations with patients to assess UFS-QOL &

SQD scores and collected data. RM reviewed and edited manuscript. MS performed statistical analysis of data and contributed to writing manuscript. FO was responsible for conceptual design, editing and contributing to the manuscript. All authors approved of the final version of the manuscript.

CONFLICTS OF INTEREST

The authors have no conflicts of interest.

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Long-term survival of young endometrial cancer patients desiring fertility preservation treated with hysteroscopic resection followed by hormone therapy (NEMO technique)

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KEYWORDS: Conservative therapy; Endometrial cancer; Fertility-sparing treatment; NEMO technique

Endometrial cancer (EC) is the most common gynecological cancer in high-income countries.¹ For EC patients of childbearing age who

have not started or completed their reproductive plans, fertility-sparing treatments may be considered. In 2005 and 2010, we reported