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Objectives

- We aimed to assess the impact of the COVID-19 pandemic on the diagnosis and treatment of gynaecological cancers in a London oncology centre.
- We hypothesised that COVID-19 caused delays in the diagnosis and treatment of gynaecological cancers, resulting in the need for more aggressive treatments.
- Our objective was to quantify this impact and to use our data to predict whether we may see a ‘rebound’ effect in the future.

Design

- Retrospective data were collated from Somerset Cancer Register, surgical records, and multi-disciplinary meetings (MDT) records at a gynaecological-oncology tertiary referral centre in London.

Methods

- The total number of patients discussed at MDT were recorded, along with oncological diagnosis (vulval, vaginal, cervical, endometrial, ovarian, placental) and total number of gynaecological malignancies. Operations were categorised according to complexity: ‘minor’, ‘major’, and ‘major-plus’.
- Data were collected for the first year of the pandemic (April 2020 – April 2021) and compared to the previous seven years.
- Using data from the previous seven years, linear regression was used to calculate pre-pandemic predicted values for April 2020 – April 2021.
- Using data from the pandemic year, linear regression modelling predicted the potential cases for April 2021 – April 2023, if the reduction in cases during the pandemic could be expected to present later.

Results

- Between April 2020 and April 2021, 1807 cases were discussed at MDT; 13.7% lower than predicted. In total, 732 operations were performed; 30% lower than predicted.
- Operations became more complex; distribution was significantly weighted towards the major and major-plus categories when compared to the previous year (45% reduction in minor surgeries, 20% reduction in major surgeries, and 15% reduction in major-plus surgeries).

Type	2020-21	2019-20	% decrease
Minor	161	295	-45%
Major	347	439	-20%
Major Plus	224	266	-15%
Total	732	1000	-27%

Figure 1: Reduction in gynae-oncology operations between 01/04/20– 01/04/21

Distribution of Operations

Figure2: Distribution of gynae-oncology operations between 01/04/20– 01/04/21

- Total cancer diagnoses decreased to 837 in the first year of the pandemic, compared to 1106 in the previous year. Linear regression modelling suggests that a compensatory rise in cancer diagnoses by up to 30% may be seen in April 2021-2023.

Number of Cancers

Figure 3: Internally diagnosed invasive gynaecological cancers.

Conclusion

- The reduction in operations could be partly accounted for by disruption to services. However, the true cause of the reduction in MDT cases is likely multifactorial; potentially fewer patients seeking attention for cancer symptoms, saturation of primary care, and/or reduction of general gynaecological clinics.
- The increased complexity of operations may also suggest that patients experienced delays throughout the diagnostic pathway, resulting in progression of disease.
- We may anticipate a rebound effect, and it is important that we prepare for this and continue to collect and analyse data to ensure cancer services are continually optimised.