Cervical Cancer and COVID: A collaborative assessment of the effect of the COVID pandemic on the presentation of Cervical cancer in the North of England

Jennifer Davies¹, Alice Spencer¹, Sian Macdonald¹, Lucy Dobson¹, Emily Haydock², Holly Burton², Georgios Angelopoulos², Pierre Martin-Hirsch², Nicholas Wood², Richard Edmondson³, Amudha Thangavelu⁴, Richard Hutson⁴, Sarika Munot⁴, Marina Flynn⁵, Katelijn Sap⁶, Michael Smith⁶, Eva Myriokefalitaki⁷, Brett Winter-Roach⁷, Bridget Decruze⁶, and Robert MacDonald¹

¹Liverpool Women's Crown Street Hospital ²Lancashire Teaching Hospitals NHS Foundation Trust ³The University of Manchester ⁴Leeds Teaching Hospitals NHS Trust ⁵Hull University Teaching Hospitals NHS Trust ⁶The Christie NHS Foundation Trust ⁷Christie Hospital

July 18, 2021

Abstract

Objective: To review the effect of the COVID-19 pandemic on the presentation of Cervical cancer. Design/ Setting: Retrospective study involving the Regional Cancer Centres in the M62 Group. Methods: Data was collected for two equal time periods. All cervical cancers were included and FIGO 2018 staging was used for the data collection. P values were calculated using binomial hypothesis test for the difference in staging. Time from symptoms to diagnosis was assessed using a normal distribution test. All other calculations were performed using chi-squared test. Statistical significance was considered if p values were <0.05. Main outcome measures: Histology, stage at diagnosis, date of onset of symptoms, investigation and type of treatment. Results: A total of 406 cases of cervical cancer were reviewed; 233 from May – October 2019 (pre-COVID) and 173 between May – October 2020 (post COVID); representing a significant reduction in new cervical cancer diagnoses of 25% post COVID (p<0.001) There was a 42% increase in the delay from start of symptoms to diagnosis Post COVID. Pre COVID, 27% of patients presented with Stage 3 or 4 disease, whilst during COVID this was 38%; statistically significant (p <0.001). When we evaluated the treatments received between the two time periods, this was also statistically significant (chi-squared, p=0.0005). Conclusions: This study has demonstrated a statistically significant increase in the stage of cervical cancer at diagnosis and a change in treatment for cervical cancer following the onset of COVID-19. The implications of this are discussed.

Hosted file

Cervical Cancer and COVID paper BJOG Submission.docx available at https://authorea.com/ users/426288/articles/530842-cervical-cancer-and-covid-a-collaborative-assessment-ofthe-effect-of-the-covid-pandemic-on-the-presentation-of-cervical-cancer-in-the-northof-england