

# Impact of SARS-Cov-2 on ectopic pregnancies management in the United Kingdom: a multicentre paired observational study

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## Abstract

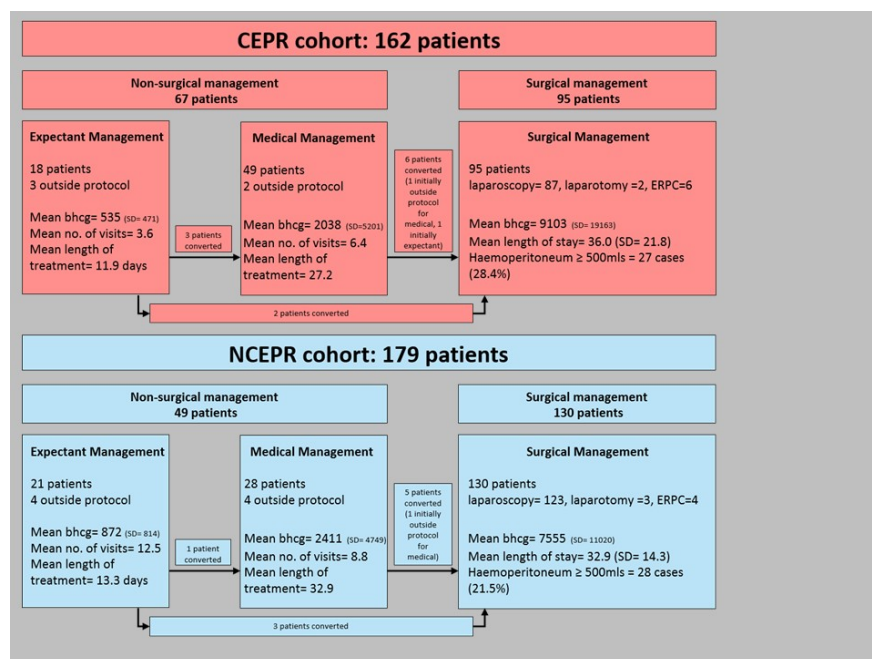
Objective: to describe the impact of COVID-19 on the management of patients with ectopic pregnancy. Design: a multicentre study comparing outcomes from a prospective cohort during the pandemic [Covid-ectopic pregnancy registry (CEPR)] compared to an historical pre-pandemic cohort [non-Covid ectopic pregnancy registry (NCEPR)]. Setting: five London university hospitals. Population and Methods: consecutive patients diagnosed clinically and/or radiologically with ectopic pregnancy (March/2020-Aug/2020) were entered into the CEPR and an exploratory matched analysis was performed comparing results to NCEPR patients (January/2019-June/2019). Main outcome measures: patient demographics, management (expectant, medical and surgical), length of treatment, number of hospital visits (non-surgical management), length of stay (surgical management) and 30-day complications. Results: 341 patients met inclusion: 162 CEPR and 179 NCEPR. A significantly higher percentage of women underwent non-surgical management versus surgical management in the CEPR versus NCEPR (58.6% [95/162] vs 72.6% [130/179];  $p = 0.0084$ ). Amongst patients managed with expectant management the CEPR had a significantly lower mean number of hospital visits compared to NCEPR [3.6 [SD 1.4] vs 13.7 [SD 13.4],  $p = 0.0053$ ]. Amongst patients managed with medical management, the CEPR had a significantly lower mean number of hospital visits [NCEPR 6.4 [SD 2.3] vs 8.8 [SD 3.9],  $p = 0.0014$ ]. There was no observed difference in complication rates between cohorts. Conclusion: women were found to undergo significantly higher rates of non-surgical management during COVID-19 first wave vs NCEPR cohort. Women managed non-surgically in CPER cohort were also managed with fewer hospital attendances. This did not lead to an increase in observed complications rates.

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