

SP10.1.9 Delay to Elective Colorectal Cancer Surgery and its Potential Implications: A Systematic Review and Meta-analysis

Thomas Whittaker¹, Mohamed Abdelrazek¹, Aran Fitzpatrick¹,
Joseph Froud¹, Jeremy Williamson², Gethin Williams²

¹Cardiff University Medical School, Cardiff, UK, ²Department of Colorectal
Surgery, Royal Gwent Hospital, Newport, UK

Aim: The ongoing Covid-19 pandemic has interrupted surgical treatment of colorectal cancer (CRC). This systematic review will assess literature concerning the risk of delay of elective surgery for CRC patients, focusing on overall survival (OS) and disease-free survival (DFS).

Methods: A systematic review was performed as per PRISMA guidelines (PROSPERO ID: CRD42020189158). Medline, EMBASE and Scopus were searched. Patients over 18 with a diagnosis of colon or rectal cancer who received elective surgery as primary treatment were included. Delay was defined as the period between CRC diagnosis and day of surgery. Metanalyses of the outcomes OS and DFS were conducted. Forest plots, funnel plots, tests of heterogeneity, and estimated Number Needed to Harm (NNHs) were produced.

Results: Of 3753 articles identified, seven met the inclusion criteria. Encompassing 314560 patients, three of the seven studies showed a delay to elective resection was associated with poorer OS or DFS. OS was assessed at a one-month delay, the HR for six datasets was 1.13 (95%CI 1.02-1.26, $p=0.020$) and at three months the HR for three datasets was 1.57 (95%CI 1.16-2.12, $p=0.004$). Estimated NNHs for a delay at one month and three months were 35 and 10 respectively. Delay was non-significantly negatively associated with DFS on metaanalysis.

Conclusions: This review recommends elective surgery for CRC patients is not postponed longer than four weeks, as evidence suggests extended delays from diagnosis are associated with poorer outcomes. Focused research is essential so patient groups can be prioritized based on risk-factors for future pandemics.