Does preoperative self-isolation increase the risk of venous thromboembolism in colorectal cancer patients?

M. R. Taylor¹ · J. Bunni¹

Received: 15 November 2020 / Accepted: 27 December 2020 / Published online: 15 January 2021
© Springer Nature Switzerland AG 2021

Dear Sir,

The COVID-19 pandemic has led to a change in the delivery of surgical care to patients. In the UK, in an attempt to minimise the risk of SARS-CoV-2 infection preoperatively, national recommendations are that patients are instructed to self-isolate for 2 weeks preoperatively.

Whilst it is crucial to try and minimise the risk and well-documented morbidity of COVID-19 for all surgical (especially cancer) patients, clinicians must also be aware of and able to support and manage the psychological and physical sequelae of this preoperative social intervention.

Whilst the psychological consequences are well documented [1] with patients experiencing isolation, anxiety and loneliness, there may be other unforeseen physical consequences less acutely considered in the midst of the seriousness of the pandemic.

We recently operated on a patient with synchronous tumours of the sigmoid colon and proximal rectum who had an uneventful laparoscopic high anterior resection. The patient weighed 130 kg but had no other comorbidities.

Within the first 48 h, the patient developed a sinus tachycardia but no other symptoms or signs and a computed tomography pulmonary angiogram was performed. This showed a small right-sided pulmonary embolus. The patient had received all appropriate postoperative doses of low molecular weight heparin (LMWH), thromboembolic deterrent stockings and intermittent pneumatic compression devices during the operation. The patient was managed on an enhanced recovery after surgery pathway.

The limited mobility as a direct result of self-isolation may well have contributed to this thromboembolism, and it is likely, due to the short time of the event after surgery, that the patient already had an undetected deep vein thrombosis.

Self-isolation is a marked shift from the pre-COVID-19 era where patients were encouraged to engage in regular exercise preoperatively. In patients who are already at high risk for venous thromboembolism (cancer patients, particularly pelvic cancers, the elderly and those with high body mass index), we propose that patients who have to self-isolate preoperatively should be considered for a short course of prophylactic LMWH. Another recent study has recommended a focus on a home exercise programme for these at risk groups [2] which we feel may be of benefit also.

It is imperative that we manage our patients holistically throughout this turbulent time and manage not just their cancer or their COVID risk insulation, but consider mitigation of pre-, peri- and postoperative risks to try and get them through surgery as safely and successfully as possible.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical approval This article is a report and does not contain studies on human participants or animals.

Informed consent For this type of study formal consent is not required.

Reference

1. Meyer J, McDowell C, Lansing J, Brower C, Smith L, Tully M, Herring M (2020) Changes in physical activity and sedentary behavior in response to COVID-19 and their associations with mental health in 3052 US adults. *Int J Environ Res Public Health* 17(18):6469
2. Demirci U, Ozdemir H, Demirbag-Kabayel D et al (2020) Reducing the risk of venous thrombosis during self-isolation and COVID-19 pandemic for patients with cancer: focus on home exercises prescription. *Clinic Applied Thrombosis/Haemostasis* 26:1–2

✉ J. Bunni
johnbunni@nhs.net

¹ Department of Colorectal Surgery, Royal United Hospitals Bath NHS Foundation Trust, Bath, UK