# A bridge over troubled water - early major surgery after coronary stenting in a patient with elevated bleeding risk

**Filip Lončarić[1]*, Tomislav Bubalo[1], Pave Markoš[1], Boško Skorić[1,2], Nadira Duraković[1,2], Ana Ostojić[1]**

[1]University Hospital Centre Zagreb, Zagreb, Croatia
[2]University of Zagreb, School of Medicine, Zagreb, Croatia

**KEYWORDS:** non-cardiac surgery, bleeding, thrombosis, multidisciplinary, eptifibatide.

**CITATION:** Cardiol Croat. 2024;19(11-12):389. | https://doi.org/10.15836/ccar2024.389

***ADDRESS FOR CORRESPONDENCE**: Filip Lončarić, Klinički bolnički centar Zagreb, Kišpatićeva 12, HR-10000 Zagreb, Croatia. / Phone: +385-91222-0480 / E-mail: loncaric.filip@gmail.com

**ORCID:** Filip Lončarić, https://orcid.org/0000-0002-7865-1108 • Tomislav Bubalo, https://orcid.org/0000-0003-1422-8439 Boško Skorić, https://orcid.org/0000-0001-5979-2346 • Nadira Duraković, https://orcid.org/0000-0001-5842-0911 Ana Ostojić, https://orcid.org/0000-0003-4234-4461

**Introduction**: Demonstrate an approach to managing a patient with elevated bleeding risk requiring major non-cardiac surgery (NCS) early after coronary stenting.

**Case overview**: The timeline is show in **Figure 1**. A 70-year-old male patient was admitted due to generalized weakness and jaundice. An CT scan revealed a mass in the head of the pancreas with no visible dissemination or vascular invasion. Two months earlier the patient underwent elective percutaneous coronary intervention (PCI) of the left anterior descending artery, whereas, eight days earlier PCI of the left circumflex artery. Acetylsalicylic acid and ticagrelor were introduced as chronic therapy. The case was discussed at the multidisciplinary meeting and urgent pancreaticoduodenectomy was recommended. The patient was ruled as a high-bleeding risk due to active malignancy and NCS required on dual antiplatelet therapy, and high-thrombotic risk due to PCI interventions performed within the past 2 months on multiple vessels, with 4 implanted stents related to a large myocardial territory. The consortium weighted the thrombotic risk as clinically relevant, and bridging with intravenous eptifibatide was recommended[1]. Ticagrelor was discontinued five days before the NCS. On the same night the patient experienced rectal bleeding - polypectomy was performed in the 48-hour window after ticagrelor discontinuation and before eptifibatide initiation, removing three polyps. Eptifibatide was initiated 4h after polypectomy. Surgery was performed without problems achieving hemostasis and periprocedural thrombotic events, revealing no local metastatic disease. A loading dose of clopidogrel was given six hours following the end of the procedure. A switch to ticagrelor was performed, and the patient discharged eight days after admission. An adjuvant chemotherapy protocol with gemcitabine was administered through 4 months, with no signs of disease at 8 months follow-up.

**Conclusion**: The decision to perform NCS early after PCI should be guided by a multidisciplinary team and patient preference to achieve the most favorable outcome. Decision on cessation of antiplatelet therapy in bleeding events should be based on clinical recommendations and tailored to the overall thrombosis and bleeding risk. Perioperative bridging with intravenous antiplatelet agents may be considered in specific clinical scenarios.

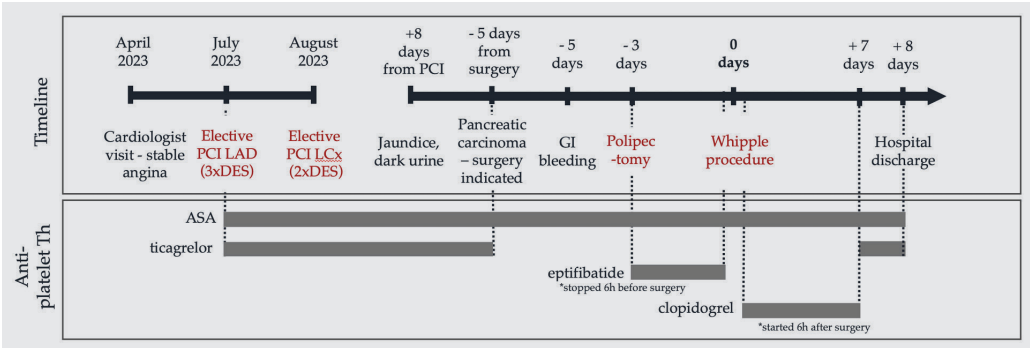


**FIGURE 1. A timeline of clinical events and periprocedural antiplatelet therapy.**
PCI = percutaneous coronary intervention; LAD = left anterior descending artery; DES = drug-eluting stent; LCx = left circumflex artery; GI = gastrointestinal; ASA = acetylsalicylic acid

**RECEIVED:**
**October 12, 2024**

**ACCEPTED:**
**October 31, 2024**

## LITERATURE

1. Halvorsen S, Mehilli J, Cassese S, Hall TS, Abdelhamid M, Barbato E, et al; ESC Scientific Document Group. 2022 ESC Guidelines on cardiovascular assessment and management of patients undergoing non-cardiac surgery. Eur Heart J. 2022 Oct 14;43(39):3826-3924. https://doi.org/10.1093/eurheartj/ehac270