# Trojna terapija u mladog bolesnika s antifosfolipidnim sindromom nakon infarkta miokarda s ST elevacijom

# Triple therapy in a young patient with antiphospholipid syndrome after ST-segment elevation myocardial infarction

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**Uvod**: Antifosfolipidni sindrom (APS) je autoimunosna bolest karakterizirana venskim i arterijskim trombozama. Učestalost infartka miokarda u bolesnika s APS-om je oko 7 %, a podatci o optimalnoj antikoagulatnoj terapiji nakon perkutane koronarne intervencije (PCI) u takvih bolesnika su nedostatni.[1,2]

**Prikaz slučaja**: Tridesetpetogodišnji bolesnik s APS-om je hospitaliziran zbog infarkta miokarda s elevacijom ST segmenta. Bolesnik je bio na terapiji varfarinom u sklopu sekundarne prevencije duboke venske tromboze s prosječnim INR-om od 2,1. Hitnom koronarografijom je verificirana subtotalna trombotska stenoza proksimalne lijeve prednje silazne grane (**slika 1**). Bez komplikacija je učinjena uspješna PCI s implantacijom stenta obloženog lijekom (**slika 2**). Odlučili smo se za primjenu antitrombocitne terapije koja se sastojala od acetisalicilatne kiseline u dozi od 300 mg i tikagrelora u dozi od 180 mg. Nefrakcionirani heparin u dozi od 100 U/kg iv je primijenjen prije i nakon intervencije. Nakon PCI i za vrijeme hospitalizacije enoksaparin 1mg/kg primijenjen subkutano je dodan dvojnoj antitrombocitnoj terapiji. Prilikom otpusta, tikagrelor je zamijenjen klopidogrelom (300 mg prvi dan, nakon toga 75 mg kontinuirano), a enoksaparin je zamijenjen rivaroksabanom u dozi od 20 mg. Acetilsalicilatna kiselina je nastavljena u dozi od 100 mg.

**Zaključak**: Smjernice za liječenje bolesnika s APS koji su imali arterijsku trombozu sugeriraju ciljnu vrijednost INR-a od 3 i više. Iako je suprotno smjernicama, mi vjerujemo da bi novi oralni antikoagulansi (NOAC) zajedno s dvojnom antitrombocitnom terapijom, postigli bolji antikoagulantni učinak i smanjili rizik od krvarenja u odnosu na varfarin s visokim ciljnim INR-om. Rivaroksaban je trenutno jedini NOAC koji je u fazi testiranja u svrhu liječenju venskih tromboza u APS (RAPS studija). Potrebne su kliničke studije o trojnoj terapiji nakon implantacije stenta u APS i sličnim sindromima.

**Background**: Antiphospholipid syndrome (APS) is a systemic autoimmune disorder characterized by venous or arterial thrombosis. Myocardial infarction occurs in about 7% of APS patients, and data on optimal anticoagulation therapy after percutaneous coronary intervention (PCI) in these patients is insufficient.[1,2]

**Case report**: 35-years-old male with APS was admitted with ST-segment elevation myocardial infarction. He was on warfarin due to secondary prevention of DVT with an average INR of 2.1. Urgent angiography showed severe thrombotic stenosis of the proximal LAD (**Figure 1**). Successful PCI with implantation of everolimus eluting stent was performed without complications (**Figure 2**). Dual antiplatelet therapy (DAPT) consisted of aspirin 300 mg and ticagrelor 180 mg that were continued as per protocol, whereas unfractionated heparin 100 U/kg IV was used before and during PCI. After PCI and during hospitalization, enoxaparine 1 mg/kg subcutaneously BID was added to DAPT. On hospital discharge ticagrelor was switched to clopidogrel (300 mg on the first day, 75 mg in continuation), whereas enoxaparine was switched to rivaroxaban 20 mg, and aspirin 100 mg was continued.

**Conclusion**: Guidelines for the treatment of patients with APS who have had arterial thrombosis suggest a target INR of 3 or more. Although being off label, we believed novel oral anticoagulants (NOAC) would achieve better anticoagulant effect and lower the risk of bleeding compared to warfarin with high target INR together with DAPT. In addition, rivaroxaban is currently the only novel anticoagulant being tested to treat venous thrombosis in APS (RAPS study). Studies on triple therapy after stenting in APS, or similar syndromes, are needed.

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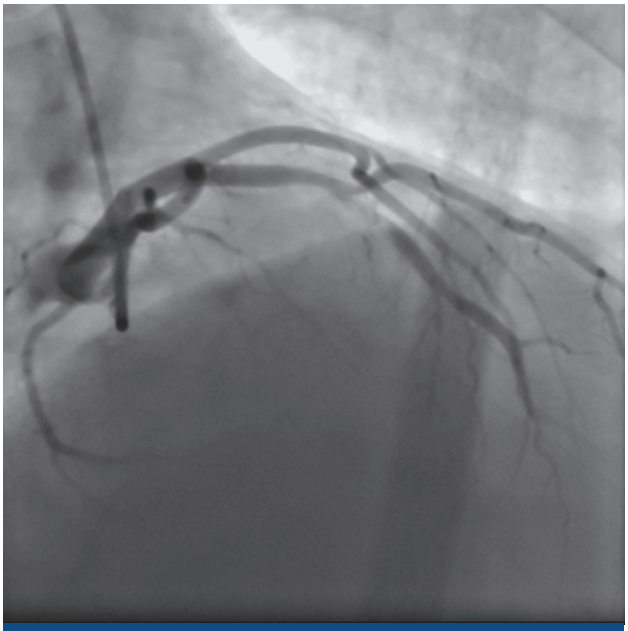

**FIGURE 1. Severe thrombotic stenosis of the proximal left anterior descending artery.**

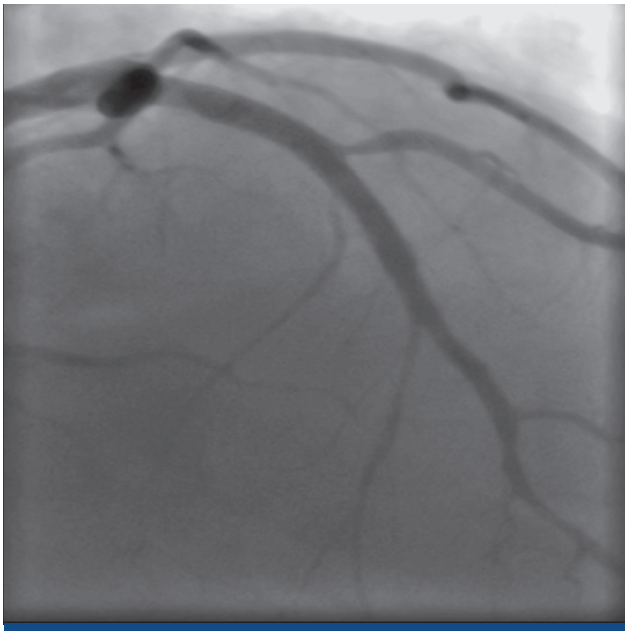

**FIGURE 2. Final angiogram after implantation of drug-eluting stent.**

## LITERATURE

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