have also suffered from a TTC, because there were no detailed data concerning cardiac function in these reports. In our report, two other trigger factors also could have promoted the TTC: the cesarean delivery itself or the oxytocin infusion, which induced a junctional tachycardia with myocardial ischemia. However, the delay between the stressful trigger and the first symptom is usually less than 2 h in the published cases of TTC after cesarean delivery.\(^1\) Moreover, our patient became transiently asymptomatic when the junctional tachycardia ended. These factors argue in favor of a probable relationship between sulprostone and the TTC.

The lesson gleaned from the described cases is worthwhile: cardiac symptoms, LV systolic dysfunction, or a slight troponin increase after sulprostone administration should lead to a suspicion of TTC. Moreover during cesarean delivery, the differential diagnosis could be an acute coronary syndrome caused by spontaneous coronary artery dissection. These two diseases can be distinguished by TTE and coronary angiography. Clinicians should be aware of this potential adverse effect when monitoring patients receiving sulprostone.

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Staphylococcus Aureus Endocarditis on Transcatheter Aortic Valves

Endocarditis por Staphylococcus aureus sobre válvula aórtica percutánea

To the Editor,

Transcatheter aortic valves are becoming an alternative for patients with symptomatic severe aortic stenosis when comorbidity makes conventional valve replacement surgery an unaffordable risk. We describe one of the first cases of infective endocarditis on the CoreValve® model (Medtronic, Minneapolis, Minnesota) prosthetic aortic valve.

An 81-year-old male with dyspnea secondary to severe degenerative aortic stenosis. Comorbidity consisted of diabetes mellitus, chronic kidney failure, and a severely depressed left ventricular ejection fraction with pulmonary hypertension >60 mmHg. The coronary arteries showed no significant lesions. The surgical risk according to EuroSCORE was 29%, so it was decided to implant a CoreValve® transcatheter prosthesis, which took place after prophylaxis with ampicillin, with no major complications. According to the aortography, there was moderate, grade II/IV residual aortic regurgitation and the patient was discharged after a week.

During the following months, an improvement of 50% was seen in the left ventricular systolic function, with a decrease of pulmonary pressure to 45 mmHg. The patient remained asymptomatic, except for an admission 4 months after the implant for self-limiting gastrointestinal bleeding leading to anemia. A colonoscopy was performed without prior antibiotic prophylaxis and diverticulosis was diagnosed.
Two months after the colonoscopy, the patient was admitted with 2-week symptoms of discomfort, disorientation, fatigue, fever, cough, and dyspnea. The physical examination revealed basal crackles and normal prosthetic sounds on auscultation. There was no hepatomegaly, splenomegaly, or skin lesions. The laboratory data showed systemic infection. The electrocardiogram showed left bundle branch block with a prolonged PR interval, similar to immediately after implantation of the prosthesis. The chest X-ray showed a diffuse interstitial pattern without clear condensation.

With the diagnosis of sepsis of probable pulmonary origin, blood cultures were taken and treatment started with cefazidime and ciprofloxacin. The patient's clinical condition worsened with persistent fever and a decreased level of consciousness. A growth of methicillin-sensitive *Staphylococcus aureus* was observed in all 3 blood cultures. Transthoracic (Fig. 1) and transesophageal (Fig. 2 and Video) echocardiograms were performed that, despite the interference with the metal prosthetic mesh, showed a vegetation of 0.8 cm maximum diameter and area of 0.3 cm² attached to the aortic prosthesis, with no significant failure or signs of periannular complications. A 6-week treatment of cloxacillin and rifampicin was started, including gentamicin in the initial 2 weeks, following the current guidelines for treatment of staphylococcal prosthetic endocarditis. A computed tomography scan ruled out stroke. Later evolution was satisfactory, with disappearance of fever and an improved level of consciousness. At discharge the patient was asymptomatic, with no systemic infection evidenced in laboratory tests, negative blood cultures, and an echocardiogram showing no vegetation, with slight transprosthetic aortic insufficiency.

This was one of the first published cases of transcatheter aortic valve endocarditis. Patients eligible for transcatheter aortic valve replacement are at a higher risk of infection from these devices, given their comorbidity. The femoral and transapical access may be a gateway for the microorganism. However, in our case it was more probably related to the later admission, given that almost 6 months had passed from the prosthesis implant to onset of symptoms, and to the expected aggressiveness of any prosthetic staphylococcal infection. However, it must be stressed that most microorganisms associated with endocarditis after colonoscopy are enterococci or *Streptococcus bovis*. Given the symptoms, surgery was considered as a treatment and further endorsed by the improvement in left ventricular function and the disappearance of severe pulmonary hypertension, which reduced the operating risk. There are several cases of successful surgery within 30 days of a transcatheter valve implant, but only one within 6 months. Endothelialization of the prosthesis may have led to replacement of both the valve and aortic root, which would have increased the complexity of the surgery and surgical risk. This consideration, coupled with the favorable evolution of the medical treatment, led us to opt for conservative management.

Given the increasing use of transcatheter implantation, new cases of endocarditis on these devices will be seen. Maximizing asepsis and antibiotic prophylaxis during the implantation and in subsequent invasive procedures will be essential to minimizing the number of cases. The fragility of the recipients poses new diagnostic and treatment challenges. Records will need to be kept to monitor the peculiarities of this new phenomenon.

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SUPPLEMENTARY MATERIAL

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