# A case of recurrent infective endocarditis following colonoscopy

A 57-year-old man with a history of prosthetic valve replacement at age 47 was admitted to our hospital with bloody stools. A colonoscopy revealed a rectal polyp, eventually diagnosed as a tubulovillous adenoma measuring 30 mm in diameter (**•** Fig. 1).

Following a 10-mL submucosal saline injection, the rectal polyp was removed by piecemeal endoscopic mucosal resection within 5 minutes. The day after the examination, the patient developed high grade fever (body temperature 39°C). Blood cultures grew Enterococcus faecalis and transesophageal echocardiography showed vegetations on the mitral valve and tricuspid valve. The patient was diagnosed as having infective endocarditis and treated with ampicillin and gentamicin sulfate. After 6 weeks of antibiotic therapy, the patient was discharged without any complications. At 18 months, the patient underwent a follow-up colonoscopy and an ascending colon polyp measuring 4 mm in diameter was removed without antibiotic prophylaxis. In the evening of the day after the examination, the patient developed fever (body temperature 37 °C). Blood cultures grew E. faecalis and transesophageal echocardiography on the third day showed a vegetation on the tricuspid valve. Antibiotic therapy consisting of ampicillin and gentamicin sulfate was given for 4 weeks after which the patient was discharged without any complications.

The causes of endocarditis following colonoscopy remain unclear. Submucosal injection or piecemeal resection may be one of the risk factors for endocarditis. According to the American Heart Association 2007 guidelines [1] and the European Society of Cardiology 2009 guidelines [2], antibiotic prophylaxis is not recommended prior to gastrointestinal tract proce-



**Fig. 1** Colonoscopy showing a rectal polyp measuring 30 mm in diameter and which turned out to be a tubulovillous adenoma.

dures. However, the guidelines may need to be reviewed as antibiotic prophylaxis is probably required in some patients, especially those with a history of infective endocarditis.

## Competing interests: None

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