中文題目:病例報告:頸關節術後植入物穿入食道引致之鏈球菌菌血症 英文題目:Sustained *Streptococcus mitis* bacteremia caused by penetrating of prosthetic cervical spine into the esophagus: a case report 作 者:黃瑞昌¹,江宗達¹,楊雅頌¹ 服務單位:¹三軍總醫院內科部感染科

Case report:

A 65-year-old woman presented to our emergency department with fever and weakness lasting for three days. Her medical history included hypertension and a giant cell tumor of the cervical spine. She had undergone surgical resection for the tumor with anterior and posterior internal fixation two years prior.

On examination, her body temperature was 38° C, heart rate: 111 beats per minute, and blood pressure: 91/49 mmHg; however, other symptoms and signs were unremarkable. Laboratory data revealed elevated serum procalcitonin (8.63 ng/mL) and lactate (2.5 mmol/L) levels. Her total white cell count was 9,490/µL with 89.5% mature neutrophils. Other data were within normal limits.

After admission, her blood cultures persistently yielded Streptococcus mitis despite effective antimicrobial therapy. Although transesophageal echocardiography revealed no vegetation, a foreign body was observed over her esophagus. Upper gastrointestinal tract panendoscopy and computed tomography confirmed penetration of the protruding prosthesis of the cervical spine into the esophagus (Figure). sophageal tissue culture yielded the same pathogen.



Figure: Computed tomography of the neck and esophagoduodenoscopy(A) Sagittal view showing anterior displacement of the fixation prosthesis (arrow). (B)A metal prosthesis with product code is visible in the esophagus (15 cm from the incisor), surrounded by ulcerative mucosa (arrow).

Discussion:

S. mitis—a member of the human oropharynx and alimentary tract commensal

flora—is considered as a benign viridans-group Streptococci. It is more commonly a culture contaminant than a true infection. In some cases, it may lead to significant clinical infections, including infective endocarditis, septicemia, and viridans streptococcal shock syndrome. Underlying malignancy, neutropenic status, and oropharynx or gastrointestinal tract mucosal lesions are important risk factors. Diagnosis of prosthesis-related esophageal rupture with persistent *S. mitis* bacteremia was confirmed based on the patient's history, blood and tissue culture results. To the best of our knowledge, this is the first report of this rare albeit important case. For patients with persistent bacteremia caused by low-virulence pathogens (such as *S. mitis* in this case), the possible origin of microflora, underlying immune status, and occult alimentary mucosal lesions should be carefully evaluated.