Background: Linezolid has been in clinical use for a decade and large surveillance studies have reported low and stable resistance rate among Linezolid pathogens. This study reports a clinical case of bacteremia due to Linezolid-resistant S. sanguinis.

Methods: Identification was performed by Vitek® 2 and confirmed by 16S rRNA sequencing. Clindamycin (A/B/C and D) and tetracycline (agar/ABC and D) and teicoplanin (turbidimetric) and genes were sequenced by PCR.

Results: A 71-year-old male had a history of ischemic cardiomyopathy and hypertension. He was readmitted in July (2011) due to severe LVAD endocarditis, requiring multiple hospitalizations, and the linezolid-resistant S. sanguinis strain causing bacteremia.

Conclusions: Several factors contributed to the persistence of the S. sanguinis strain including co-resistance to streptogramin A and pleuromutilins and the lack of effective second-line antibiotics for this strain of S. sanguinis.