outcome was affected due to patients without true LBBB were analyzed as LBBB patients. Alqarawi et al described the ECG findings of new LBBB post TAVR and proposed a new ECG definition of LBBB which includes 2 novel findings: notching/slurring of the R wave in at least one lateral lead and an R wave ≤ 20 ms in V15. A recent Expert Panel suggested that patients with unresolved NO-LBBB on day 2 post TAVR, which defined as QRS duration >150 ms or PR interval >240 ms could be considered for PPI. In addition, approximately 90% of TAVR related NO-LBBB occurs within 24 h, and may be associated with mechanical damage of the guide system. The damage may be temporary, some NO-LBBB can be recovered within hours or days. However, nearly 60% of them will persist after discharge. Late-onset LBBB is very rare. Therefore, prolonged postoperative ECG monitoring is necessary.

Clinical Consequences of NO-LBBB

High-grade AVB after TAVR usually indicates a poor prognosis, however, patients with NO-LBBB often have insidious clinical symptoms and weak intervention indications. The effect on cardiac function and mortality of TAVR related NO-LBBB is also controversial. Houthuizen et al6 found that 34% 233/679 of patients developed NO-LBBB upon hospital discharge, and patients with LBBB post TAVR had an increased mortality and morbidity compared to those without LBBB, while Testa et al7 found that 27% (224/818) of patients developed NO-LBBB by hospital discharge, mortality and morbidity remained statistically insignificant after 1 year follow up. However, echocardiographic data of Testa's study were only available in 50% of the patients. However, only the Edwards SAPIEN prosthesis were implanted in those studies, and the number of patients developed persistent LBBB was significantly lower. The low incidence of LBBB makes it difficult to evaluate outcomes in this group. In a recent study of 1629 patients undergoing TAVR by Chamandi etc., after 3 years of follow-up, patients with NO-LBBB had a mean decrease in LVEF of (1.4 ± 0.9) % (P<0.001), and LVEF increased (1.9 ± 0.6) % in patients without LBBB (P=0.002), and PPI rate increased (15.5% vs. 5.4%, P=0.002) in patients with NO-LBBB10. Thus, NO-LBBB after TAVR implantation is associated with a deterioration in cardiac function and quality of life, but the effect on mortality was unsure.

Pacing Treatment of new LBBB

At present, there is no unified guideline for the indications for pacing therapy after TAVR, and the determination of pacing patients is usually based on clinician's personal judgment. Prompt pacing intervention is very n h,