

Table S1 Reported cases of provoked *Staphylococcus lugdunensis* endocarditis

| Author (publication year-country/region) | Patient age (years)/gender | Procedure performed | Valves involved | Blood cultures | Outcome |
|--|----------------------------|---|--|--|--|
| Breen <i>et al.</i> (1994-USA) | 73/F | Right heart catheterization via left inguinal | AV endocarditis | Blood cultures positive for SL | Alive, AV replacement |
| Kralovic <i>et al.</i> (1995-USA) | 26/M | Tooth extraction | Bicuspid aortic valve endocarditis and valve ring abscess | Several blood cultures positive for SL | Alive, AV replacement |
| Fervenza <i>et al.</i> (1999-USA) | 39/M | Vasectomy | MV bilateral leaflet vegetation with severe MR | Blood cultures positive for SL | Alive, MV repair |
| Polenakovik <i>et al.</i> (2000-USA) | 55/M | Left heart catheterization via left inguinal | TTE negative for endocarditis and patient refused TEE | 5/6 blood cultures positive for SL | Alive, antibiotics treatment only |
| Jones <i>et al.</i> (2002-USA) | 16/M | Skin abrasion by gardening tool | Congenital AV stenosis with vegetations (16.6×6.7 mm) in RA, LV septum, MV and right coronary cusp of AV | 6/6 blood cultures positive for SL | Alive, debridement MV, TV, VSD closure and Ross procedure with reconstruction of the aortic outflow tract |
| Kourbeti <i>et al.</i> (2007-Greece) | 33/M | AVR for bicuspid valve | Aortic valve dehiscence, displacement with small vegetation, paravalvular leak and regurgitation | 2/3 blood cultures positive for SL | Died, severe hemodynamic instability |
| Viganego <i>et al.</i> (2007-USA) | 75/M | Femoral endarterectomy and femoral-popliteal bypass | Aortic valve 3.5 cm vegetation | 4/4 blood cultures positive for SL | Died, severe hemodynamic instability |
| Chopra <i>et al.</i> (2010-USA) | 41/M | Recurrent manipulation left subclavian dialysis permcath resulted AICD lead infection | Large vegetation attached to right atrial pacemaker lead, ventricular AICD lead and the tricuspid valve | 8/8 blood cultures positive for SL | Alive, AICD removed and TV not replaced |
| Patil <i>et al.</i> (2011-USA) | 46/M | MVC with multiple exploratory laparotomies with infected ventral hernia mesh | Multiple tricuspid valve vegetation, largest 2.6×1.9 cm | 2/2 blood cultures positive for SL | Alive, TV replacement |
| Cevasco <i>et al.</i> (2012-USA) | 50/M | Vasectomy | Aortic valve vegetation non-coronary cusp with root abscess | Blood cultures positive for SL | Alive, AV replacement |
| Mrzljak <i>et al.</i> (2012-Croatia) | 63/M | A liver transplant patient, 6 years prior had foot pustule | Mitral valve vegetation with moderate MR and moderate TR | Blood cultures positive for SL | Alive, MV replacement and tricuspid annuloplasty |
| Tsao <i>et al.</i> (2012-Taiwan) | 66/F | 3 years prior pacemaker insertion, undergone electrode repositioning | Intra-cardiac shunt with vegetation on ventricular lead | Blood cultures positive for SL | Died, sudden cardiac arrest |
| Arain <i>et al.</i> (2013-USA) | 66/M | Trans rectal biopsy | Myxomatous degeneration MV posterior leaflet, perforation anterior leaflet with mobile mass on atrial side | 4/4 blood cultures positive for SL | Alive, MV replacement |
| David <i>et al.</i> (2015-USA) | 36/M | A vasectomy complicated with MCA stroke | Mitral valve vegetation, with perforation and regurgitation | Blood cultures positive for SL | Alive, MV replacement |
| Schandiz <i>et al.</i> (2015-Norway) | 56/M | Bilateral vasectomy. | MV large vegetation with severe regurgitation | Not reported | Died, severe hemodynamic instability |
| Khafaga <i>et al.</i> (2016-Austria) | 35/F | 24 weeks pregnant. Admission big toe wedge resection for paronychia | MV-perforated anterior leaflet and vegetation 20×11 mm | 2/2 blood cultures positive for SL | Alive, post-cesarean section mitral valve replacement |
| Guillaume <i>et al.</i> (2017-France) | 2/M | Langerhans cell histiocytosis on chemotherapy via totally implantable venous access port | 2 vegetations on septal leaflet TV (largest 13.1×14.3 mm), progressing (21×14 mm) associated with TR (2/4) | 4/4 blood culture positive for SL | Alive, resection of vegetation and TV valvuloplasty |
| Mukaihara <i>et al.</i> (2017-Japan) | 74/M | History of MV repair for severe regurgitation 8 years prior. with acupuncture therapy 2 weeks prior to presentation | Initial vegetation 12 mm P2 of MV rapidly expanding with severe MR and pulmonary hypertension. Associated at post-operation day 10 mycotic aneurysm of SMA | Blood cultures positive for SL | Alive, MV replacement followed by aneurysm resection |
| Al Majid (2018-KSA) | 73/M | Gluteal abscess drained | Vegetations on TV, MV and AV with aortic root abscess | 2/2 blood cultures positive for SL | Alive, TV, MV and AV replacement and aortic root abscess debridement |
| Hirose <i>et al.</i> (2019-Japan) | 2/M | re-RVOTR with BJV graft and at day 6 symptoms began | Mediastinitis with vegetation of the BJV and TV | Blood cultures positive for SL | Alive, BJV replacement with TV replacement |
| Iftikhar <i>et al.</i> (2019-USA) | 20/M | With Blount's disease with orthosis removed | Vegetation on PV with regurgitation | 2/2 blood cultures positive for SL | Alive, PV replacement |
| Yamazaki (2020-Japan) | 81/M | Presented with fever, 4 years after AVR | vegetation over prosthetic aortic valve and LVOT and aortic annular abscess | Blood culture positive to SL | Alive, redo AVR and aortic annular reconstruction |
| Ishidou <i>et al.</i> (2020-Japan) | Neonate/F | Post-op bilateral pulmonary artery banding and Norwood procedure. Post-op 29 th day with fever and treated for SL in blood. 1 month after with acute hypoxia and bradycardia | Echo prior to discharge negative for endocarditis. Autopsy post 1 month discharge revealed RV-PA conduit with large vegetation obstruction | Blood cultures positive from central line for SL | Died, no surgical intervention |
| Singhal <i>et al.</i> (2021-USA) | 78/F | TVAR | Vegetation from aortic root to anterior mitral leaflet | Blood cultures positive for SL | Died, 7 days post-op TVAR explantation, tissue AV and MV replacement, TV repair, VSD closure and RV free wall perforation repair |

F, female; AV, aortic valve; M, male; SL, *staphylococcus lugdunensis*; MV, mitral valve; MR, mitral regurgitation; TTE, transthoracic echocardiogram; TEE, transesophageal echocardiogram; RA, right atrium; LV, left ventricle; TV, tricuspid valve; VSD, ventricular septal defect; AVR, aortic valve replacement; AICD, automatic implantable cardioverter defibrillator; MVC, motor vehicles crash; TR, tricuspid regurgitation; MCA, middle cerebral artery; SMA, superior mesenteric artery; re-RVOTR, repeat right ventricular outflow reconstruction; BJV, bovine jugular vein; PV, pulmonary valve; LVOT, left ventricular outflow tract; RV, right ventricle; PA, pulmonary artery; TVAR, transcatheter aortic valve replacement.