

Methicillin-Resistant *Staphylococcus aureus* Mediastinitis: Editorial

Metisilin-Dirençli *Staphylococcus aureus* Mediastinit

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One of the lethal complication of open heart surgery is postoperative mediastinitis (poststernotomy mediastinitis, deep sternal wound infection) with a mortality rate of 15-50%.¹ “Mediastinitis” is defined as to be having at least one of the following conditions after sternotomy; culture isolation, peroperative diagnosis, chest pain/sternal instability/fever.² The etiology remains mostly *Staphylococcus* species, which can be isolated also from normal flora of the skin.³ If the responsible pathogen is methicillin-resistant *Staphylococcus aureus* (MRSA), either community-acquired or hospital-acquired, treatment remains more difficult. As presented by Jakob and associates colonization of the bacteria in nasal mucosa might be somewhat responsible for forthcoming mediastinitis with this pathogen.⁴ Treatment of *S. aureus* mediastinitis is still medical challenge due to antimicrobial resistance. Although vancomycin mentioned for the antibiotic treatment in work performed by Pasic and associates, there is an increasing number of studies revealing resistance to vancomycin against *S. aureus*.⁵⁻⁹ Treatment of mediastinitis consists conservative as well as aggressive surgical interventions. Sternal debridement, with or without muscle/omental flap closure, local irrigation, drainage remain some of the treatment options.¹⁰ Sjögren and coworkers performed perfect algorithm for vacuum-assisted closure therapy in deep sternal wound infections.¹¹ They remove all sternal wires, performed tissue cultures and then applied vacuum-assisted closure with 125 mmHg, with the antibiotics as vancomycin and imipenem. Following 2-4 days they evaluate CRP levels and continued therapy, based on the level of CRP for 70 mg/L.¹¹ Egitilen and associates performed prophylactic combination of Robicsek Method and the figure “8” in patients with risk factors as obesity, low cardiac output syndrome, diabetes mellitus, chronic obstructive pulmonary disease,

old age, resternotomy, malnutrition, osteoporosis, previous radiotherapy to chest region, immunodeficiency, sternal trauma to prevent postoperative sternal complications.¹²

This issue of the *Turkiye Klinikleri Journal of Medical Sciences* provides two studies (original research and medical education) dealing with related infections and an excellent commentary by Dr. Jean Carlet.¹³⁻¹⁵

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