

We aimed to determine the incidence, risk factors and complications of RSV infections in infants with CHD. Our second goal was to determine the efficacy of monoclonal antibody (palivizumab) prophylaxis.

**Methods:** The study population constituted of 419 patients less than 2 years of age with the diagnosis of LRTI. 241 (57%) of those patients had the diagnosis of CHD and they were hemodynamically unstable and required continuous medical therapy. 178 (43%) patients did not have CHD. RSV was diagnosed by Respi Strip in samples obtained with nasopharyngeal swab.

**Results:** In CHD patients with LRTI, the rate of hospitalization due to RSV was 14% and the average length of stay was 9.9 days (5- 17 days). 30% of these infants had to be treated in the pediatric intensive care unit and 18% required mechanical ventilation. These rates were significantly higher when compared with patients without CHD and who were infected with RSV ( $p=0.01$ ). 15 mg/kg/dose monoclonal antibody (palivizumab) was applied monthly during RSV season to 29 CHD patients. The rate of in-patient treatment before prophylaxis was 59% and it reduced to 14% after prophylaxis ( $p=0.001$ ). Only one patient with CHD died due to RSV infection (2%).

**Conclusion:** RSV is an important virus leading to mortality and morbidity for infants with CHD, also in developing countries like Turkey. Prophylaxis with monoclonal antibody (palivizumab) is effective for these patients. Since in 20% of infants with LRTI, the causative agent was RSV; this necessitates the utility of diagnostic methods for RSV to prevent useless antibiotic therapies and to enable isolation precautions to be taken more effectively.

### P3878 | BEDSIDE

#### Lyme disease as a cause of transient disorder in myocardial conductive function

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**Introduction:** Lyme boreliosis is a disease induced by a sting of an infected tick, leading to various systemic body manifestations. Initially it can be asymptomatic, and after incubation period it can clinically present itself in different forms, depending on the organ system affected. Heart is rarely a target for boreliosis, and if it does happen, usually it is manifested in some forms of myocarditis.

**Methods and results:** Over the period of four years in our facility, there were 5 cases of boreliosis with the existence of conductive interference. These patients were followed by an infectious disease specialist and controlled by the cardiologist. In 2 cases the interference was a part of the later disease manifestation. However, in 3 cases with younger patients after diagnosing conductive interference ranging from AV block grade II Mobitz I to AV block grade III, it was first epidemiologically and then serologically determined the presence of boreliosis, connected to the initial disease manifestation. All patients received adequate antibiotic therapy, and after appropriate monitoring and follow up they came out of the block within 7 to 10 days. A complete non-invasive cardiac diagnostics was performed, including documented 24h Holter monitoring ECG for each patient at least twice: initially when administering the patients and after stopping of the block.

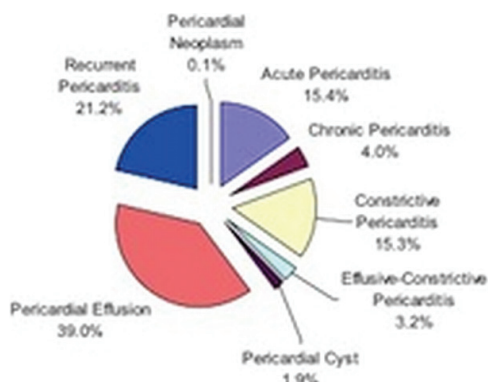
**Conclusion:** Although not in typical forms, myocardial conductive disorder could be a manifestation of Lyme disease. Thus in cases where a conductive disorder is diagnosed, it would be wise to exclude it, as a possible etiological factor. Furthermore, these disorders are transient with the adequate antibiotic therapy.

### P3879 | BEDSIDE

#### Pericardial disease syndromes at a large tertiary-care pericardial center: a four-year survey

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**Introduction:** Pericardial disease (PD) is associated with significant morbidity and mortality. With the start of a new PD treatment center, number of referrals has been increasing. The prevalence of PD syndromes among the cardiology outpatient population is unclear.



Pericardial disease syndromes 2007-2010

**Hypothesis:** The different PD syndromes are equally represented at a large-tertiary care pericardial center.

**Methods:** Cardiology outpatients with PD were identified using ICD-9 billing codes from January 1, 2007 through December 31, 2010. PD syndromes were classified based on the 2004 European Society of Cardiology PD Guidelines.

**Results:** There was a grand total of 201,917 cardiology outpatient visits over the four-year period. A total of 2,124 visits (1.1%) had the diagnosis of PD. Of these, 1,074 unique patients (53.4% male, mean age 54.5±16.6) were identified. Pericardial effusions (39%, n=419), recurrent pericarditis (21.2%, n=228), acute pericarditis (15.4%, n=165), and constrictive pericarditis (15.3%, n=164) comprised the majority of PD diagnoses. The most frequent etiologies for PD were idiopathic (53.4%, n=573), post-cardiac surgery (26.3%, n=282), viral (7.1%, n=76), and auto-immune (4.6%, n=49). The number of PD visits per year increased from 368 in 2007 to 824 in 2010.

**Conclusions:** A wide variety of PD syndromes are represented in the cardiac outpatient population. Pericardial effusions, recurrent pericarditis, acute pericarditis, and constrictive pericarditis are the most common causes, respectively. The large percentage of post-operative etiologies is driven by the high volume of cardiac surgery at a large tertiary-care center. Further studies are needed to determine standards of care and patient outcomes for this increasing entity of PD.

### P3880 | BEDSIDE

#### Treatment of neoplastic pericardial effusion in lung cancer: comparison of 4 different therapeutic approaches

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**Purpose:** The optimal treatment of neoplastic pericarditis (NP) in lung cancer (LC) is still a clinical challenge. Various treatment methods are used: pericardiocentesis (P), pericardial window (W), systemic chemotherapy (CT), local (intrapericardial) CT, combined systemic and local CT. Aim of this study is to compare 4 different approaches, all including CT, using an objective scoring system to assess the outcome. No such studies are available so far.

**Methods:** We retrospectively reviewed the data of 146 LC patients (pts) (106 males, 40 females) with NP requiring drainage and confirmed by cytology. A neoplastic score (intrapericardial effusion and masses) was used to assess the severity of pericardial involvement at diagnosis and at the last available follow-up or when a new intervention (drainage or window) was necessary. The outcome was classified as: Complete response (CR) if no effusion or masses were detectable at follow-up; partial response (PR) if the neoplastic score was reduced and no more intervention were necessary, stable disease (SD) or progression (PD) if the score was unchanged or worsened.

**Results:** Pericardiocentesis plus: local CT (P+L) was performed in 24 pts; systemic CT (P+S) in 44; combined (P+S+L) therapy in 55. Twenty three pts had pericardial window plus systemic CT (W+S). A complete response was obtained in 67% of pts treated with local CT (alone or with systemic CT). A complete or partial response was obtained in 96% of pts receiving P+S+L, in 91% of those that underwent W+S, and in 88% of those with P+L; CR or PR was obtained in 64% with P+S ( $p<0.001$ ). A significantly longer survival was obtained with combined CT (ANOVA test  $p=0.001$ ).

Therapies	Total N	CR (%)	PR (%)	CR+PR (%)	SD/PD (%)	Follow-up days min-max (median)
P + L	24	16 (67)	5 (21)*	21 (88)	3 (13)	13-474 (53)*
P + S	44	12 (28) <sup>§</sup>	16 (36) <sup>§</sup>	28 (64)*	16 (36)	6-455 (85) <sup>§</sup>
P + S + L	55	37 (67) <sup>§§</sup>	16 (29) <sup>§§</sup>	53 (96)*	2 (4)	16-960 (180) <sup>§§</sup>
W + S	23	0*	21 (91)	21 (91)	2 (9)	8-758 (77) <sup>¶</sup>

Pairwise comparison  $p<0.05$

**Conclusions:** The most effective treatment of NP in LC is pericardial drainage and combined CT. Pericardial window with systemic CT and drainage with local CT are also effective, but with significantly shorter survival.

### P3882 | BEDSIDE

#### Initial management of severe malignant pericardial effusion with percutaneous balloon pericardiomy

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**Purpose:** Malignant pericardial effusion (MPE) is associated with adverse out-