Conclusion: This study showed for the first time, the specific MBL gene present in P. aeruginosa isolated from burn patients in Tehran, Iran.

**PP-019** Plasma lipids levels in patients with acute bacterial infections

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Objectives: The aim of present study was to assess impact of acute bacterial infections on plasma lipids levels. The other purpose was to determine the value of plasma lipid measurements in the diagnosis of acute bacterial infection.

Materials and Methods: A cross-sectional study was conducted on 112 patients with acute bacterial infections admitted in hospital and 112 healthy individuals as control. Levels of total cholesterol, high-density lipoprotein cholesterol, low-density lipoprotein and triglycerides were measured in blood samples of all subjects. Mean level of serum lipids were compared in both groups.

Results: Both groups were matched based on age (P = 0.10), gender (P = 0.789), BMI (P = 0.515) and history of diabetes mellitus (P = 0.231). Compared with control subjects, in patients with acute bacteria infections, significantly lower levels of total cholesterol (P = 0.013) and high-density lipoprotein cholesterol (P = 0.001) were found. There was no statistically significant differences in triglycerides (P = 0.194) and low-density lipoprotein (P = 0.079) serum level between patients and controls.

Conclusion: These results suggested that acute bacterial infection seem to be associated with decreased serum cholesterol and high-density lipoprotein level. Therefore plasma lipids levels may serve as indicators of acute bacterial infections.

**PP-020** Botulism outbreak in northern Iran: five cases in one family

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Objectives: Despite many food borne diseases which require only supportive therapy, botulism needs special attention and specific therapy and has a high mortality without therapy.

Methods: We report an outbreak of botulism in five members of a family in north of Iran due to consumption of a sort of food. They presented with weakness, ptosis, blurred vision and diplopia. They were treated with trivalent botulinum antitoxin. Toxicology on stool and food material was positive for botulinum toxin A.

Result: Two weeks after administration of antitoxin, clinical symptoms such as ptosis, blurred vision, diplopia, and muscle power improved and side effects like anaphylactic shock, local skin reaction and serum sickness were not seen.

Conclusion: Despite high mortality rate, appropriate diagnosis and treatment play a great role in patients’ improvement. Precise history taking, complete physical examination and considering botulism, will reduce mortality. It is necessary to teach people about preparation of canned food.

**PP-021** Early intervention of video-assisted thoracoscopic surgery (VATS) improves outcome of adult thoracic empyema

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Background: To explore the optimal time for Video-assisted thoracoscopic surgery (VATS) of adult thoracic empyema.

Methods: A cohort of 90 adult patients with thoracic empyema from Jan 2007 to Dec 2010 were divided into three groups by the time from onset to surgery: 2 weeks (Group A, n = 30), 4 weeks (Group B, n = 30) and 6 weeks (Group C, n = 30). Demographics, comorbidities and laboratory data were balanced among groups. All the patients were given routine therapy and underwent VATS debridement and decortication.

Results: Intraoperative bleeding of Group A (median loss 50 ml, range 25–100 ml) was significantly (Z = −2.511, P = 0.031) less than that of Group B (median loss 225 ml, range 150–450 ml) and C (median loss 250 ml, range 150–600 ml). Operation time, duration of postoperative chest drainage and postoperative hospital stay of Group A was significantly shorter than those of Group B and C (Z = −3.003−2.011, P = 0.018–0.042). No patients in Group A required conversion to thoracotomy, 5 (16.7%) and 7 (23.3%) patients in Group B and C required conversion thoracotomy respectively (P = 0.009, 0.007). Postoperative complications of Group A including atelectasis, prolonged air-leak, sepsis were reduced significantly compared with Group B and C (P = 0.021, 0.001).

Conclusion: Early intervention of VATS for adult empyema thoracis demonstrated better outcomes, less invasion, shorter hospitalization and lower conversion to thoracotomy.

**PP-022** Video-assisted thoracic surgery (VATS) is superior to chest tube drainage in fibropurulent empyema

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Background: To evaluate the feasibility and efficacy of video-assisted thoracic surgery (VATS) for fibropurulent stage thoracic empyema.

Methods: Sixty eight patients with fibropulutronic thoracic empyema were enrolled prospectively between January 2008 and June 2010, closed tube drainage and antibiotic therapy had not achieved satisfactory results in this series. Sixty eight patients were allocated into two group, Group A (n = 32): underwent VATS debridement and decortication, Group B (n = 36): continued chest tube drainage, fibrinolytic therapy and pleural cavity irrigation. Demographics, comorbiditis and laboratory data were balanced between the two groups.

Results: Hospital stay (HS) and chest tube drainage time of Group A were significantly shorter than Group B (p = 0.031, 0.012). Fever duration of Group A was also significantly shorter than Group B (p = 0.042). Expense of two groups were similar (p = 0.54). 6.2% (n = 2) patients in Group A required conversion thoracotomy. There were no surgery-related complications and death in Group A. 22.2% (n = 8)