Imported Baby Corn Causing Outbreaks of Shigellosis in Denmark and Australia

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Background: Outbreaks of foodborne shigellosis are rare in developed countries. Concurrent outbreaks of Shigella sonnei infection were detected in Denmark and Queensland, Australia in mid-August 2007. Baby corn or sugar snaps imported from Thailand were suspected to be the vehicle after preliminary interviews in Denmark. Both foods were recalled in Denmark on 17 August. Collaborative investigations were undertaken in Denmark, Australia and Thailand to pinpoint the source of the outbreaks.

Methods: Sh. sonnei cases were ascertained through national surveillance systems in Denmark and Australia (01/08/2007–30/09/2007). In Denmark, we conducted a retrospective cohort study amongst employees in one affected workplace to identify the source of infection. The outbreak strain was characterised using pulsed field gel electrophoresis (PFGE) and shared using Pulsnet International. We undertook food trace-back and microbiological investigation of samples from implicated batches.

Results: 215 cases were laboratory-confirmed in Denmark and 12 in Australia, along with a further 43 epidemiologically-linked cases. In the cohort study, we identified 27 symptomatic cases amongst 117 respondents (response rate 69%). The attack rate was 56% among employees who ate baby corn on 6 or 7 August (RR 4.0, 95%CI: 1.8-8.9) and in a multi-variable analysis, baby corn was the only independent risk factor. PFGE profiles of outbreak strains in Denmark and Australia were indistinguishable. The most common source was a packing house in Thailand, which supplied baby corn to both Denmark and Australia.

Conclusion: Epidemiological, microbiological and trace-back evidence identified baby corn imported from one packing house in Thailand as the source of large Sh. sonnei outbreaks in Denmark and Australia. These outbreaks highlight the importance of international communication for linking outbreaks and pinpointing the source. We recommend improving hygiene standards for raw exotic vegetables and blanching before consumption.

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Overlook on Epidemiology and Causative Agents of Rickettsia in Adults in Albania


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Objective: Knowing the epidemiology and causative agents of rickettsia.

Materials: Study involved 202 cases with rickettsia ages 14–70 years old during 1986–2006. The identification was achieved through ELISA, Comlement, Indirect Immunofluorescence and Well-Felix Reaction.

Methods: Epidemiologic View - We have analyzed the distribution in years, seasons and group ages of rickettsioses cases. Rickettsia were classified based on pathogen and clinical presentation.

Results: Epidemiologic -The number of cases with Rickettsia varies from 6–84 yearly with a prevalence in months June-September. The incidence was consistent peaks every 4–5 years. The more affected age groups were 20–40 years old, but 14–70 years old were affected as well.

Causative Agents: Exantematike Typhos (Murine Typho) 142 cases. Mediterran Butunose Fever 50 cases. Q Fever 10 cases.

Conclusions:

- Rickettsioses are yearly diseases.
- In Albania there are 3 causative group of Rickettsia: Murine Typho, Mediterran Butunose Fever, Q Fever.
- The most common our is the Typho Murine 70.3% (142 cases).

69.024

100 Years of Trachoma in the State of Sao Paulo, Brazil

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Trachoma was introduced in the State of Sao Paulo with the immigrants from Mediterranean countries, in late XIX century. It soon reached high prevalence rates in the whole State. In 1907 the State government organized the first "Trachoma Campaign". The aim of the present study was to recover the "epidemiologic history" of trachoma in Sao Paulo, as its recognition as a public health problem turns a century old.

A descriptive study on the trends of trachoma occurrence was undertaken. Data on trachoma occurrence were gathered from all identified sources. The main source was the archive of Sao Paulo State Health Department. There was no systematic data collection in the early years of the program. From 1938 until 1976 the State Trachoma Institute maintained a routine information system. From 1983 on, data were obtained from the State’s epidemiologic surveillance system, and published studies. Peak incidence rate was in 1951. Incidence rates gradually decreased from 429 per 100,000 in 1951 to 25 in
1967. In 1976 trachoma was considered eradicated in the State, and the control program was interrupted. In 1983 cases of chronic conjunctivitis in children started being reported again, and subsequent studies showed trachoma had never been truly eradicated. State’s trachoma control program was re-established, and in the past twenty years several studies have redesigned its distribution in the State.

From hyperendemic prevalence levels in the first half of the century, trachoma rates gradually decreased in Sao Paulo. Prevalence survey among schoolchildren detected a rate of 4.4% in 2002. Endemic trachoma is still found in most municipalities of the State, in some of them reaching as high as 10% prevalence among children, threshold for the recommendation of mass treatment. This neglected disease remains as a public health problem in the State, especially among the poorer segments of the population.

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69.025

Study of Severe Community-Acquired Pneumonia in Adults - Etiology, Prognosis, and Antibiotic Therapy

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Objective: A retrospective study of 128 patients with severe community-acquired pneumonia was carried out to determine the causative agents, the impact foreknowledge of the etiology has on the outcome, the value of clinical and radiologic criteria in predicting the evolution, and the efficacy of empirical therapy.

Method: From the beginning of 1999 until 2006, we studied 128 patients who required hospitalization for severe community-acquired pneumonia. The clinical criteria for admission to the study were respiratory failure (PaO₂ < 60 mmHg), septic shock, extrapulmonary septic complications, radiographic evidence of more than one affected lobe, cavitation, or an initial pleural effusion greater than 250 mL. The study group included 84 men and 44 women (mean age: 70.2 ± 12.3 yr), and 67.2 % suffered from a chronic illness, such as hypertension, chronic obstructive pulmonary disease, diabetes mellitus, or a malignancy. The causes of severe community acquired pneumonia were: Staphylococcus aureus (327 cases: 7.1%), Pseudomonas aeruginosa (170 cases: 3.7%), Klebsiella spp. (123 episodes: 2.7%), and Enterococcus faecium (117 cases: 2.5%). Significant time-based modifications occurred only for Pseudomonas aeruginosa (temporal increase: p < .02), Klebsiella spp. (temporal increase: p < .001), and Enterococcus faecium (temporal increase: p < .05). Among fungi, Candida albicans was the most represented organism, with 124 episodes (3.7%), without changes in its frequency in the 2004–2007 period.

Results: Of 4,606 overall episodes, Staphylococcal epidemics remained the leading organism (983 cases: 21.3%), but a dramatic drop in its frequency occurred during the observation time (from 26.1% of cases in 2004, to 14.3% in 2007; p < .0001). The second cause of bacteremia was Escherichia coli (463 episodes: 10.1%), followed by Staphylococcus aureus (327 cases: 7.1%), Enterococcus faecalis (245 episodes: 5.3%), Pseudomonas aeruginosa (170 cases: 3.7%), Klebsiella spp. (123 episodes: 2.7%), and Enterococcus faecium (117 cases: 2.5%). Significant time-based modifications occurred only for Pseudomonas aeruginosa (temporal increase: p < .02), Klebsiella spp. (temporal increase: p < .001), and Enterococcus faecium (temporal increase: p < .05). Among fungi, Candida albicans was the most represented organism, with 104 episodes (2.3%), without changes in its frequency in the 2004–2007 period.

Conclusions: A prospective microbiological monitoring is expected to significantly add to the awareness of local epidemiological figures and antimicrobial sensitivity profile of hospital infections, including bacteremias, which are responsible for considerable morbidity and mortality rates among inpatients. Although the main ethiological agents of inpatient bacteremias are still represented by coagulase-negative Staphylococci, these microorganisms significantly declined during the four-year study period, thus confirming a positive trend toward a progressively reduced incidence of contaminated blood cultures. On the other hand, an appreciable increased frequency occurred over time for Pseudomonas Klebsiella, and Enterococcus spp. A major, persisting role as agents of hospital bacteremic episodes...