

association was found between the presence of IHD and arteriogenic causes of ED, a poor response to intracorporeal injection, poor rigidity in the Digital Inflection Rigiditymeter, and low peak systolic velocity (PSV) in the cavernosal arteries ( $P < 0.05$  for each). No statistically significant association was found between the presence of IHD and increasing end-diastolic velocity values or decreasing resistive index in the cavernosal arteries ( $P < 0.05$  for each). A statistically significant association was found between a higher grade of IHD and a decreasing PSV value ( $P < 0.05$ ).

**Conclusions:** The results of this study established that a reduced PSV of the cavernous artery is associated with IHD. Determining the PSV could be a reliable screening tool for the detection of IHD in patients with ED.

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### Cytokines as a predictor of progression to valvular disease in children with rheumatic fever

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The immunologic basis of rheumatic fever is well established. However the role of penicillin in the control of the rheumatic process and the prevention of development of rheumatic heart disease is poorly understood.

**Objective:** the objective of this study was to monitor the changes in serum levels of Tumour Necrosis Factor (TNF-alpha) and interleukin-8 (IL-8) in children presenting with various stages of rheumatic fever over a time.

**Subjects and methods:** Study included 42 children aged 6–15 years with RHD followed up over one year by Doppler-echocardiography and laboratory tests to monitor IL-8 and TNF-alpha by ELISA technique.

**Results:** Twenty five children presented with acute arthritis with or without carditis (59.5%), all had statistically significantly high levels of IL-8 and TNF-alpha throughout the follow-up period. Of these 9 (36%) developed rheumatic reactivity and 6 (24%) developed valvular heart disease. Eight children (19%) presented with rheumatic chorea, all had significantly high levels of IL-8 and TNF-alpha throughout the follow-up period, of whom 4 (50%) developed valvular disease. Nine children (21.4%) presented with varying degrees of established chronic rheumatic heart disease, all of whom had no rise in the serum levels of IL-8 and TNF-alpha.

**Conclusions:** These findings indicate that the clinical and epidemiological pattern of rheumatic fever is changing. Immunomodulatory responses could assist us in tracking these changing patterns of disease and assessing current protocols of management.

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### Hospital acquired infections in postoperative paediatric cardiac surgical ICU

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Healthcare-associated infections (HAIs) are infections that patients acquire during the course of receiving treatment for other conditions within a healthcare setting [1]. There is a vast body of literature which showing that HAIs are a major cause of patient morbidity and mortality in developed countries [2]. The aim of this study was to determine the rates of HAIs mainly Device associated Infections (DAIs) and their impact on patient outcome. This study was an open labelled, cohort, prospective study. All admitted cases in the Postoperative Paediatric Cardiac Surgical ICU in Cairo University, Children Hospital, Egypt from 01/01/2009 to 30/12/2010 were included. The study included 175 patients, 88 (50.3%) males, and 87 (49.7%) females. We reported a Ventilator associated Pneumonia (VAP) rate of 73/1000 MV days, Catheter-associated Laboratory Confirmed Blood stream infection (CLAB) rate of 18.8/1000 CL days, and Catheter associated Urinary tract Infection (CAUTI) of 7/1000 UC days. DAIs rates are higher than the Bench marking determined by the International Nosocomial Infection Control Consortium (INICC) using standardized definitions [3]. Fifty four (30.9%) of the studied patients died at the end of the study. HAIs were strongly related to mortality by univariate analysis ( $p = 0.011$ ), but not significantly related to mortality by multivariate analysis ( $p = 0.67$ ). The average extra length of hospital stay due to HAI was 5.4 days. The overall rate of (HH) Hand Hygiene compliance was lower in this study than in the overall INICC PICUs: 47.1% vs 58.6%. In summary, Surveillance of HAIs-defining the magnitude and nature of the problem-is the first step toward reducing the risk of infection in vulnerable hospitalized patients. The next step is to implement targeted basic infection control practices that have been shown to prevent HAIs [2].

### References

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### Cardiotoxicity induced by clozapine in adult male albino rats and possible protection by selenium: A histological study

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