

ABSTRACT FOR THE KENYA PEDIATRIC ASSOCIATION ANNUAL CONFERENCE (2018)

TITLE: UNEXPECTED FINDINGS AT PEDIATRIC AUTOPSY, 2010-2018: A PATHOLOGIST'S EXPERIENCE

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Introduction

The pediatric clinical autopsy is an essential aspect of clinical quality improvement. While clinical autopsy rates are declining worldwide, pediatric clinical autopsies are performed in less than 0.1% of all neonatal, infant and child deaths in Kenya, mainly within Nairobi.

Methods

Selected series obtained from routine and a research directed autopsy practise.

Results

1. Thymic atrophy: This is a common finding in 90% of pediatric SARI cases and appear to be associated with rickets, protein energy malnutrition and thrombotic microangiopathy. In one case, a four-month infant had thymic aplasia in addition to severe, invasive bacterial and fungal disease, suggesting a primary immune deficiency.
2. Infections: *Pneumocystis Jirovecii* pneumonia appears to be a common complication of malnutrition and necrotizing Klebsiella pneumonia as a common fatal hospital acquired infection. Four autopsies performed as a response to an infectious disease outbreak identified bacterial bronchopneumonia, providing guidance to response efforts. Adenoviral pneumonia associated with malnutrition and pelvic zygomycosis mimicking a malignant neoplasm were identified. Visceral Leishmaniasis was identified as a primary autopsy diagnosis in 2 cases.
3. Neoplasms: A rare finding of acute leukemia.
4. Trauma: undiagnosed in approximately 8% of SARI cases consisting mainly of head and retroperitoneal injuries, likely non-accidental.

Conclusion

Clinical autopsies are still relevant for identifying unusual presentations of common and rare diseases. While there are many barriers to autopsy, well designed autopsy series or their incorporation into routine clinical care, public health research or clinical quality assurance programs are required. These can identify unusual or rare diseases in addition to generating clinical and public health research questions.