

Endogenous endophthalmitis: A 21-year review of cases at a tertiary eye care centre

Purpose: The primary objective was to identify causative organisms of endogenous endophthalmitis. Secondary aims were to determine systemic risk factors and visual prognostic factors.

Methods: A retrospective review of all subjects presenting to Auckland District Health Board (Auckland, New Zealand) between 1999 and 2020 with endogenous endophthalmitis.

Results: Seventy-eight eyes from 62 subjects were diagnosed with endogenous endophthalmitis over the study period. Median age was 61.6 years and 32 subjects (51.6%) were male. Diabetes was the most common risk factor seen in 24 (38.7%) subjects. 17 subjects (27.4%) presented directly to ophthalmology and 17.4% had an initial misdiagnosis. Forty-nine subjects (79.0%) presented with reduced vision and only 27 (43.5%) presented with pain. Hypopyon was present in 13 eyes (16.7%). Gram-positive bacteria were the most common causative organism seen in 40 (51.3%) eyes, followed by yeast and fungi in 21 (26.9%) eyes, then gram-negative bacteria seen in 17 (21.8%) eyes. Median final best-corrected visual acuity was 6/18. Severe vision loss occurred in 33 (42.3%) eyes and 7 (9.0%) eyes required evisceration or enucleation. Presenting visual acuity was a significant predictor of visual outcome.

Conclusion: Endogenous endophthalmitis occurred at 1.9 cases per million per year. Ophthalmologists require a high index of suspicion for underlying systemic infection in any subject presenting with ocular inflammation, and need to be aware that endogenous endophthalmitis may present without pain and frequently without hypopyon