Conclusions. Coccidioidal meningitis among children is a severe form of coccidioidomycosis associated with significant morbidity and mortality. Published literature in the pediatric population is limited, particularly on coccidioidal meningitis. Here we describe a large case series of pediatric coccidioidal meningitis followed at a tertiary care center in an endemic region.

Methods. We performed a retrospective case review of patients ≤21 years old followed at our facility with a diagnosis of coccidioidal meningitis from January 1, 2000, to December 31, 2018.

Results. Overall, 30 patients were identified during the study period. The median age was 10.8 years (IQR: 4.6-15). The majority of patients were previously healthy (93%) and all required hospitalization. Fever (90%), headache (70%), vomiting (53%), and fatigue (57%) were the most common clinical manifestations. More than one-third (40%) had concurrent pulmonary disease. Only 20 patients (67%) had initial Coccidioides complement fixation (CF) titers ≥1:16. The majority had extra-axial brain involvement (60%) and seven (23%) had associated spinal canal disease. Over two-thirds required shunt placement (70%) and almost half of them (43%) underwent revision. Neurological complications including paresis/paralysis, stroke, neuropathy, seizures, and cognitive delay were observed in 20% of patients. Two-thirds (73%) of patients received fluconazole as the initial drug. However, 37% of those had fluconazole failure, requiring alternative treatment. Due to refractory disease, two patients required a novel triazole, isavuconazole, while adjunctive therapy with steroids and interferon-gamma (IFNγ) was used in 20% of patients. Most cases (83%) stabilized, 13% experienced relapses and/or progressive disease, and 3% were fatal.