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Tuberculosis in Adolescents, Particularly in Those Older Than 15 Years, May Present Characteristics Similar to Those of Adults

To the Editors:

We read with interest the recent publication by Carril et al[1] titled Adolescent Tuberculosis: 6 Years of Experience in a Tertiary Care Pediatric Hospital in Buenos Aires, Argentina. This study provides further evidence that tuberculosis in adolescents, particularly in those >15 years of age, may present characteristics like those of adults, with a higher frequency of severe pulmonary disease leading to pulmonary sequelae.[1] We support and appreciate the authors' work and agree with their conclusions, but have some concerns about some of the details in the article.

Adolescence is a high-risk period in a person's life for new tuberculosis infection and subsequent progression to tuberculosis disease.[2] Compared to children, tuberculosis in this age group is also more easily transmissible, making adolescents considered a high-risk population for tuberculosis transmission in the community.[3] Tuberculosis among adolescents has been neglected to date. However, this situation is changing, and adolescent tuberculosis has recently been recognized as a priority on the adolescent health research agenda.[4] Adolescents and young adults make up a significant proportion of patients starting antituberculosis treatment, so improving treatment outcomes in this population is crucial for global tuberculosis control.[5]

In the issue of *Pediatric Infectious Disease Journal*, Carril et al retrospectively analyzed 292 tuberculosis patients aged 10–19 years admitted to the Phthisiology Department of the Children's Hospital "Dr. Ricardo Gutiérrez" (tertiary care pediatric hospital in the Autonomous City of Buenos Aires, Argentina), between January 2016 and December 2021.[1] They conducted a retrospective analysis to continuously evaluate tuberculosis in adolescents (10–19 years) diagnosed with tuberculosis. Importantly, it highlights that tuberculosis in adolescents, particularly in those >15 years of age, may present characteristics like those of adults, with a higher frequency of severe pulmonary disease leading to pulmonary sequelae.[1] However, these data are limited by a lack of information on follow-up, which could provide insights for clinic or even community interventions to promote adolescent engagement in tuberculosis treatment. Additionally, there may be other unconsidered factors in this study that could impact the results, such as patient lifestyles, level of education, antibiotic abuse, environmental factors (air pollution), diagnostic delays, or other comorbidities. The lack of control over other potential factors may limit the interpretability of the results. Third, the absence of an adult control group means direct comparisons or inferences cannot be made, thus suggesting a comparison with an adult tuberculosis group. Finally, the article mentions the impact of the COVID-19 pandemic on tuberculosis diagnosis and treatment but does not deeply analyze this impact. The pandemic may lead to the reallocation of medical resources, changes in patient healthcare-seeking behavior, etc., which could influence the study findings.

In conclusion, before these issues are clarified, this study's findings should be interpreted cautiously.

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A Case of Late Congenital Syphilis

To the Editors

Congenital syphilis results from the maternal-fetal transmission of *Treponema pallidum*, posing a life-threatening consequence of undiagnosed, untreated or inadequately treated maternal infection and can also lead to high morbidity rates.[1]

Following a dental examination revealing hypoplasia in his molar teeth, a 12-year-old male patient was referred to our clinic. His medical history was unremarkable, with no additional systemic complaints. On physical examination, his tooth structure appeared smaller than normal, with a deep notch in the middle of the cutting surfaces and tapered sides toward the biting edges. Poor development was observed in the first molar teeth (Fig. 1). Neurologic examination was normal. There were no skin findings. Laboratory tests revealed a hemoglobin level of 13.9 g/dL, platelet count of 296,000/mm^3 and leukocyte count of 6500/mm3. Kidney and liver function tests were normal. Venereal disease research laboratory (VDRL) test was not reactive. Treponema pallidum particle agglutination assay (TPHA) was negative, while fluorescent treponemal antibody absorption (FTA-ABS) IgG was positive. Eye examination and hearing test were normal. The bone survey examination revealed normal bone structure integrity. A sclerotic limited, lobulated bone lesion consistent with a nonossifying benign fibroma was observed in the proximal diaphysis of the right humerus. The patient was diagnosed with late congenital syphilis and initiated penicillin G treatment (50,000 units/kg/dose once weekly for 3 weeks).

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Informed consent has been obtained from parents for incorporating the patient details into the article.
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FIGURE 1. Tooth structure that is smaller than normal and has deep notches on the cutting surfaces (Hutchinson's teeth), developmental disorder of first molar teeth (Moon's molars).

Late congenital syphilis, defined by clinical symptoms appearing after the age of 2, develops in approximately 40% of neonates born to women with untreated syphilis during pregnancy.[1] Late manifestations of congenital syphilis arise due to scarring or persistent inflammation resulting from early systemic disease. Although tooth, bone, eye and eighth cranial nerve involvement, as well as gommatous lesions in visceral organs, skin or mucosa, are anticipated in most cases, it can also present with milder findings, as seen in our case.[2] Congenital syphilis presents 3 main dental abnormalities; Hutchinson's incisors, Moon's molars (bud molars) and Fournier's molars (mulberry molars).[3] In congenital syphilis, affected incisors show a deep vertical notch in the middle of their free edge due to crown lobe fracture. This notch, alongside the narrowness and shortness of the tooth, is the main feature of Hutchinson's teeth, the most recognized dental manifestation of the condition. Moon's molars are small and dome-shaped. With this finding, the patient was referred to us. Fournier's molars are a form of permanent molar defect associated with congenital syphilis in which there is a deep groove around the base of each ridge caused by enamel hypoplasia.

Early treatment of either the mother during pregnancy or the neonate during the first 3 months of life can prevent most symptoms of late congenital syphilis.[1] In recent years, an increase in adult syphilis cases and congenital syphilis cases has been noted.[4] This trend may lead to an increase in late-diagnosed congenital syphilis cases in the future, which is concerning. Raising awareness about congenital syphilis is crucial in preventing the disease and improving outcomes through strict adherence to screening examinations, early diagnosis, and treatment.

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Actinotignum schaalii Can Cause Bacteremia in Children Without Urogenital Abnormalities

A Case Report

To the Editors:

Actinotignum schaalii is a facultative anaerobic coryneform Gram-positive rod and a rare cause of urinary tract infection in people with underlying urogenital disease or immunodeficiency.[1] Here we present a case of *A. schaalii* bacteremia without urogenital abnormality or immunodeficiency.

A 14-year-old Japanese boy presented to the emergency department with a fever for 5 days and gross hematuria and dysuria for 2 days. He had severe autism spectrum disorder and intellectual disability, but no history of urogenital abnormalities, immunodeficiency or severe bacterial infections. On admission, he had a fever with shivering and tachycardia. Sepsis was suspected. Laboratory tests revealed the following: leukocytes, 3500/μL; neutrophils, 86.0%; thrombocytes, 50,000/μL; PT-INR, 1.55; C-reactive protein, 0.42 mg/dL. Other laboratory data were unremarkable, including immunoglobulins and complements. Urinalysis revealed pyuria and hematuria. Contrast-enhanced whole-body computed tomography showed no signs of renal abscess, pyelonephritis or urinary tract anomalies. In a microbiological study, Gram staining of urine showed coryneform Gram-positive rods (Fig. 1A,B).

Gram-positive rods were observed after incubation of a urine sample for 48 hours at 35 °C. They were also detected from a blood culture after incubation for 45 hours at 35 °C (Fig. 1C,D). The species of the colonies could not be identified by a phenotypic test and was identified as *A. schaalii* by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry. The minimum inhibitory concentrations of several antibiotics showed good susceptibility, including ampicillin and cefotaxime.

He was diagnosed with bacteremia and a lower urinary tract infection due to *A. schaalii*. Ceftriaxone and amoxicillin were administered for 6 days and amoxicillin was subsequently administered for 8 days, leading to recovery and no recurrence of bacteremia.

A few cases of *A. schaalii* infection in children have been reported and almost all of them involved urogenital abnormalities such as neurogenic bladder and vesicoureteral reflux.[2–4] However, our case had no morphological abnormalities of the kidneys or urinary tract. Furthermore, there was no evidence of immunodeficiency based on laboratory tests and his medical

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