

table, body temperature was 37.6° C, heart rate 214/min, respiratory rate 40/min and blood pressure 69/41 mm Hg. There was a firm, warm and erythematous right submandibular swelling. Ultrasound examination of the neck revealed soft tissue swelling and enlarged submandibular lymph nodes. White blood cell count was 4500/mm³, and cerebrospinal fluid (CSF) analysis was normal. Blood culture grew group B *Streptococcus* (GBS). CSF culture was negative. Five days later, his twin B sister was admitted due to poor feeding for 1 day with no associated fever. Her temperature was 37.5°C, heart rate 168/min, respiratory rate 40/min and blood pressure 91/50 mm Hg. She appeared irritable and had an erythematous, firm and tender swelling in the right submandibular region. The white blood cell count was 6900/mm³, and CSF analysis was normal. Ultrasound examination of the neck revealed multiple swollen lymph nodes with fluid collection. Blood culture grew GBS. CSF culture was negative. Both twins were treated with IV ampicillin for 10 days with clinical improvement and resolution of submandibular cellulitis-adenitis.

Pulsed field gel electrophoresis of the 2 GBS isolates was performed at Michigan Department of Community Health Bureau of Laboratories using restriction enzyme *sma*-I. The pulsed field gel electrophoresis patterns of the 2 isolates were indistinguishable indicating a common source of exposure in both twins.

The relative risk of invasive GBS infection in a twin sibling of an affected infant has been estimated to be as high as 25-fold.¹ In a case series of 6 sets of twins by Edwards et al,² 2 siblings of 6 index cases with late-onset GBS infection were found to be infected with same GBS serotype as their index cases. One was asymptomatic at the time of evaluation, and the other became symptomatic 4 days after his index sibling was hospitalized. As a result, the authors adopted the approach of obtaining blood and CSF cultures from the twin sibling of an index case and initiating antibiotic treatment pending culture results, regardless of the presence or absence of symptoms. Doran et al³ described 9-week-old identical twins who developed late-onset GBS disease 48 hours apart with genetically identical GBS isolates. The American Academy of Pediatrics recommends that “the sibling of a multiple birth index case with early- or late-onset GBS disease should be observed carefully and evaluated and treated empirically for suspected systemic infection “if any signs of illness occur”.”⁴ However, such approach of observation and initiating treatment only after signs or symptoms appear may lead to invasive GBS disease in the asymptomatic twin sibling as was recently reported by Erez et al.⁵

Our twin B became symptomatic 5 days after hospitalization of her index sibling. Earlier evaluation and empiric treatment of twin B might have prevented her GBS invasive disease. The clinical presentation of our twins 5 days apart underscores the importance of preemptively obtaining blood and CSF cultures from the twin sibling of an index case and initiating treatment before signs of illness occur, which has been previously suggested.^{2,5}

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High-risk Human Papilloma Viruses in Childhood Warts

To the Editors:

A 28-month-old girl presented with multiple cutaneous warts on both hands and the right foot. The child was immunocompetent. The family history revealed cervical low-grade squamous intraepithelial lesions in her mother. Human papilloma virus (HPV) DNA detection study using the polymerase chain reaction technique revealed the presence of an alpha HPV type, HPV 57, in her cutaneous lesions, whereas the presence of “high-risk” HPVs 16 and 18 was excluded. Her mother’s cervical smear samples were positive for HPV 16. Cutaneous warts were not present in her mother or in another member of her family. The presence of HPV 57 in all cutaneous lesions of our patient was in accordance with the findings by other researchers,^{1–4} who have demonstrated the predominance of alpha HPV types in cutaneous warts in both immunocompetent and immunodeficient patients.

Despite the positive maternal history of our case, no “high-risk” HPVs were detected in any of the cutaneous lesions examined. Recently, “high-risk” HPV 16 was detected in almost 33% of the HPV-positive cutaneous wart samples, indicating the presence of mucosal “high-risk” HPV types in the skin of children.¹ The presence of HPV DNA can reflect infection, and this relationship can be potentially aetiopathogenic. Because the genomic diversity of HPV types can have a different impact on their clinical manifestations,⁵ this hypothesis expanding the role of “high-risk” HPV types to the pathogenesis of cutaneous warts warrants further investigation. It should be noted that the presence of “high-risk” HPV types in cutaneous warts can also occur either because of DNA contamination by HPV types localized in other anatomical sites or when a technical approach with low sensitivity is used. For these reasons more accurate protocols and more sensitive procedures, such as sequencing analysis, should be followed to elucidate the real impact of “high-risk” HPV types in children’s skin.

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Tuberculosis of the Thyroid Gland in an Adolescent Girl with Disseminated Tuberculosis

To the Editors:

Thyroid tuberculosis (TB) is a very rare condition, even in countries with a high prevalence of TB; and primary TB of the thyroid is even rarer.¹ Among the different manifestations of tuberculous thyroiditis, abscess of the thyroid appears to be the rarest and the most dangerous.² The patients reported in the literature ranged in age from 9 to 83 years, with a median age of 40 ± 16 years for men and 44 ± 17 years for women.³ We could not find more than 10 cases in children, youngest being a 5-month-old female infant,^{4,5} apart from some 40 cases of congenital TB.⁶

We report the case of 11-year adolescent girl with complaints of recurrent pain and swelling of the left elbow for the past 10 months. She would improve symptomatically after 2–3 weeks of antibiotics. She presented to us with gradually increasing midline neck swelling of 1 month duration, which moved

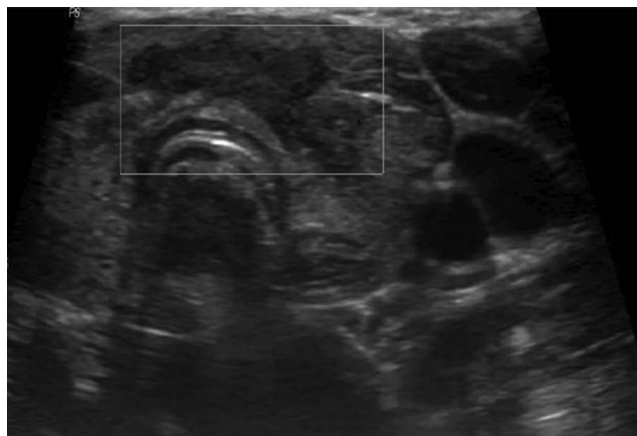


FIGURE 1. Ultrasonogram of thyroid gland showing hypoechoic lesion in isthmus and both lobes of thyroid.

with deglutition. There was an associated decrease in appetite and weight loss. She had no history of dyspnea, dysphagia or hoarseness. There were no features suggestive of hypo/hyperthyroidism. Her ante/peri/postnatal histories were noncontributory. She was the first product of nonconsanguineous marriage. There was no history of contact with TB. Her development was normal.

Her pulse rate was 92/min, respiratory rate 18/min and blood pressure 96/64 mm Hg. She had pallor and bilateral cervical lymphadenopathy with 2–3 on each side that were discrete, mobile and nontender varying from 1 to 2 cm in size. A right axillary lymph node was 1 cm in size single and discrete. Bilateral inguinal lymph nodes were 2 cm and matted. She had a midline neck swelling 4×5 cm in size with a smooth surface. Their mass was tender, firm and mobile, with normal overlying skin. Local examination of the left elbow revealed swelling and ulceration with granulation tissue and a discharging sinus. Her weight was 25 kg (-1 to -2 SD, WHO), height 135 cm (b/w 3rd & 15th centile, WHO) and body mass index 13.7 (<3 percentile). She also had hepatosplenomegaly with liver span of 10 cm and spleen 4 cm below costal margin. Other system examination was within normal limits.

In view of these findings, and it being an endemic area, a provisional diagnosis of disseminated TB was made. Investigations revealed hemoglobin of 10.9 g/dL, total leukocyte count 9780/ μ L and erythrocyte sedimentation rate of 40 mg/dL. Peripheral blood smear showed anisopoikilocytosis, microcytes and moderate hypochromia. Liver function and renal function tests were normal. Mantoux was 15 mm after 48 hours with 5 TU. Chest radiograph revealed consolidation in the right pericardiac region with right-sided pleural effusion. Thyroid hormone values were normal for her age as follows: T3-1.01 (0.82–2.13) ng/mL, T4-10.90

(5.60–11.70) μ g/dL, TSH-3.26 (0.7–6.40) μ IU/mL. Results of HIV-ELISA and anti-thyroid peroxidase antibodies were negative.

On ultrasound neck there was evidence of irregular hypoechoic lesions in the isthmus and both lobes of the thyroid along with cervical lymphadenopathy, largest on right side (3.1×2 cm; Fig. 1). On Color Doppler examination the lesions were avascular. Computerized tomographic scan of the neck showed evidence of enlarged B/L lobes of thyroid with hypodense soft tissue lesions in both lobes against the enhancing normal tissue. The isthmus lesion showed peripheral enhancement suggestive of central necrosis, along with cervical lymphadenopathy. On computerized tomography of the chest there was consolidation in the right lower lobe with right pleural effusion and mediastinal lymphadenopathy. Thyroid scan revealed a small cold nodule at the inferior pole of left lobe of the thyroid gland.

Fine needle aspiration of the thyroid revealed epithelial cell granulomas with peripheral lymphocytic cuffing, Langhans giant cells and caseation necrosis. Acid fast bacilli were found on Ziehl-Neelsen staining. Her sputum was negative for acid fast bacilli and no organism could be isolated from the discharge from her elbow. Antituberculous treatment was started with isoniazid, and rifampicin for 6 months and pyrazinamide and ethambutol for 2 months (2 HRZE + 4 HR). After 6 months of treatment there was marked improvement in the form of weight gain, improved appetite and increase in hemoglobin. The thyroid swelling had reduced markedly and follow-up ultrasonography revealed hypoechoic lesions in both lobes with cervical LAP. Right lobe measured $3.1 \times 1.3 \times 1.2$ cm and left lobe $1.1 \times 1.2 \times 3.0$ cm. Isoniazid and rifampicin were continued for another 3 months. After 9 months of treatment, her thyroid swelling had regressed. Her

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