A Large Outbreak of Thiamine Deficiency Among Illegal Gold Miners in French Guiana.


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BACKGROUND: From September 2013 to July 2014, several gold miners working in the tropical forest consulted the Maripasoula Health Center in French Guiana for edema and findings consistent with right-sided cardiac failure. Of the 42 cases of beriberi that were diagnosed, one patient died.

FINDINGS: The laboratory and clinical investigation demonstrated vitamin B1 deficiency in most of the patients tested. Furthermore, 30 of 42 patients responded favorably to 500 mg of intravenous or intramuscular thiamine supplementation. In addition, dietary investigation showed insufficient thiamine intake in these patients. We concluded that patients had acquired beriberi because of diet restrictions, hard labor, and infectious diseases, notably malaria. In 2016, cases were still being reported.

CONCLUSION: We recommend screening for compatible symptoms in gold miners, thiamine supplementation, and nutritional intervention.

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