

Modern Trends in an Old Illness: An Analysis of Trends in Pediatric Patients with Scurvy from a National Database

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INTRODUCTION:

Scurvy is among the oldest known diseases of nutritional deficiency. In the modern era, it has become increasingly rare due to improved nutrition both in the United States and globally; however, isolated case reports are plentiful. Notably, in the pediatric population, many of these patients present with musculoskeletal complaints, frequently lower limb pain, or joint pain and swelling. This study aims to assess the incidence of scurvy in the pediatric population, as well as elucidate trends in the demographics and complaints of those affected by this disease.

METHODS:

This was a retrospective study, drawing data from the National Inpatient Sample (NIS) from years 2016 through 2020. Patients with scurvy were identified by ICD-10 code and the incidence of scurvy was calculated. A number of demographic variables were collected from patient records, including age, gender, weight classification (overweight, obese, morbidly obese), race and ethnicity, insurance status, and household income level. These demographic variables were compared to the rest of the pediatric inpatient population. Additionally, we recorded common concurrent musculoskeletal complaints.

RESULTS:

Patients with scurvy were more likely to be obese ($p<0.001$), male ($p<0.001$), and have a household income in the lowest quartile. Notably, the incidence of scurvy rose over the study period, from 8.21 per 100,000 in 2016 to 26.67 per 100,000 in 2020. Common concurrent musculoskeletal diagnoses included knee pain, low back pain, contracture of the knee, synovitis, and tenosynovitis.

DISCUSSION AND CONCLUSION:

The incidence of scurvy in the pediatric population rose from 2015 to 2020. Risk factors for scurvy include male gender, obesity, and lower socioeconomic status. Common related musculoskeletal complaints in these patients include joint pain and swelling.