

## Maple Syrup Urine Disease

Jorge Alvarez<sup>1</sup>, Gerardo Rivera Silva<sup>1</sup> and Hector R. Martinez Menchaca<sup>2\*</sup>

<sup>1</sup>Department of Basic Sciences, University of Monterrey, Mexico

<sup>2</sup>Department of Orthodontics, Pediatric Dentistry and Special Care, University of Louisville, USA

\*Corresponding author: Hector R. Martinez Menchaca, Department of Orthodontics, Pediatric Dentistry and Special Care, University of Louisville, 501 S. Preston Street, Louisville Kentucky, 40202, USA, Tel: 1 502 8527601; E-mail: [hector.martinez@louisville.edu](mailto:hector.martinez@louisville.edu)

Rec date: Mar 04, 2016, Acc date: Jun 27, 2016, Pub date: Jul 01, 2016

Copyright: © 2016 Alvarez J, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Clinical Image



**Figure 1:** Physical examination of maple syrup urine disease.

A 9 day-old male infant presented with generalized seizures, irritability, lethargy, vomiting, skin abrasions in the genital area and sweet-smelling urine with a resemblance to burnt sugar in odour. Physical examination showed cutis marmorata in abdomen and thorax, swelling of external genitalia associated with skin abrasions as well as lacerations in perineum and upper medial side of both thighs, and generalized erythema (Figure 1). Plasma and urine amino acid analysis revealed a perceptible increase of branched chain amino acids (BCAA). The diagnosis of maple syrup urine disease was confirmed on low branched-chain- $\alpha$ -keto acid dehydrogenase complex activity in lymphocytes. The patient was treated with a BCAA-free diet and thiamine (0.2 milligrams daily), with a good response.