Perinatal variables from newborns of Aymara mothers suggest a genetic adaptation to high altitude Variables perinatales de recién nacidos de madres Aymara sugieren adaptación genética a la altura

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© 2014, Sociedad Medica de Santiago. All rights reserved. Background: Studies performed in Andean populations living in high altitude, indicate that the reduced availability of oxygen could be associated to both a fetal growth retardation and a lower birth weight. These variables are predictive of morbidity and mortality during the first year of life. Aim: To study perinatal variables of newborns of mothers living at contrasting altitudinal levels, harboring different degrees of Aymara ancestry. Subjects and Methods: Review of medical records of 5,295 women whose deliveries occurred between February 2004 and August 2010. Information was obtained on place of residence, grouped into two categories: coast (150 to 3,000 m) and high plateau (3,000 to 4,300 m), ancestry was estimated using number of Aymara surnames that were homologated to percentages of Amerindian admixture, gestational age, birth weight, height, head circumference and obstetric variables. Results: Gestational age showed a