




# Best posters of the XXI International Congress of Pediatrics of the Ecuadorian Pediatric Society. Quito, 12-14 August 2021.

Fernando Aguinaga\*<sup>1</sup>  Paúl Astudillo Neira  
<https://orcid.org/0000-0001-7685-7279> <https://orcid.org/0000-0001-8380-6103>

1. Presidente de la Sociedad Ecuatoriana de Pediatría núcleo de Quito.
2. Director de la Revista Ecuatoriana de Pediatría.

## Summary

**Received:** August 15, 2021  
**Accepted:** August 18, 2021  
**Released:** Aug 31, 2021

### Bibliographic letterhead::

Aguinaga F, Astudillo P. Best posters of the XXI International Congress of Pediatrics of the Ecuadorian Pediatric Society. Quito, August 12-14, 2021. *Revista Ecuatoriana de Pediatría* 2021;22(2):Article 17:1-7 doi: <https://doi.org/10.52011/118>

 Copyright Aguinaga F, et al. This article is distributed under the terms of the [Creative Commons Attribution License CC BY-NC-SA 4.0](https://creativecommons.org/licenses/by-nc-sa/4.0/), which allows its use and redistribution, citing the source and the original author for non-commercial purposes.

**Introduction:** The XXI International Congress of Pediatrics of the Ecuadorian Pediatric Society was held from August 12 to 14, 2021 in the city of Quito-Ecuador. The objective of the congress was to maintain the academic activity of the core society of Quito during the COVID-19 pandemic with the slogan "For Comprehensive Pediatric Care during the COvid-19 pandemic".

**Methods:** In virtual mode, videoconferences were held on the topics of cardiology, gastroenterology, infectious diseases, immunizations, neonatology, neurology, nephrology, nutrition, traumatology, intensive therapy, oncology and psychology. The best posters of the congress are presented.

**Results:** A committee of experts selected the best clinical cases. The best posters of clinical cases were selected: Bilateral ductal stent in neonate with discontinuous pulmonary arterial branches: case report. Clinical case: From tubular acidosis to metabolic alkalosis. Miller Fisher syndrome, Guillain Barré variant: case report. The best studies: Project "my family as part of my care" in the neonatology unit of Hospital Metropolitano based on the philosophy "Family Center Care", Factors associated with obesity in children between 5-12 years of age, Hospital Carlos Andrade Marín, 2018. Longitudinal Retrospective Study on the Relationship between Autism Spectrum Disorder (ASD) and Epilepsy in a Pediatric Population in Quito-Ecuador. Breastfeeding in newborns and infants with allergy to cow's milk proteins: a retrospective study.

\* For correspondence.

E mail: [revista.ecuatoriana.pediatria@gmail.com](mailto:revista.ecuatoriana.pediatria@gmail.com)

Mention: 1st place clinical cases section.  
Module: Interventional Cardiology

## Bilateral ductal stent in neonate with discontinuous pulmonary arterial branches: case report

Pamela Reyes\*<sup>1</sup>, David Reinoso Recalde<sup>2</sup>, Ricardo Gonzales Quinteros<sup>3</sup>, Esthela Barona Freire<sup>4</sup>, Raúl Ríos-Méndez<sup>5</sup>.



1. Resident Physician of Pneumology at the "Baca Ortiz" Pediatric Hospital.
2. Resident Physician of Intensive Care at the "Baca Ortiz" Pediatric Hospital.
3. Intensive Care Pediatrician at The "Baca Ortiz" Pediatric Hospital.
4. Anesthesiologist at The "Baca Ortiz" Pediatric Hospital
5. Child Interventional Cardiologist at the "Baca Ortiz" Pediatric Hospital.

**Introduction:** There are few reports of interventionism in patients with discontinuity of pulmonary arterial branches and bilateral ductus arteriosus, so the objective was to report the first case of a patient with disconnection of the pulmonary arterial branches and bilateral ductus arteriosus treated with im-stent plant.

**Case report:** This is a male newborn weighing 2.7 kg, SaO<sub>2</sub> of 60%, with infusion of PGE<sub>1</sub>, referred from an institution in the coastal region to our center for systemic-pulmonary fistula surgery with angiographic diagnosis of pulmonary atresia, confluent pulmonary branches and left ductus arteriosus. The surgery revealed the absence of true pulmonary artery branches, which led to the abortion of the procedure. A new cardiac catheterization was performed showing situs solitus, levocardia, single ventricle, right aortic arch, pulmonary atresia with disconnected branches and bilateral tortuous ductus arteriosus, for which two coronary tan-dem stents were implanted in each ductus arteriosus from the femoral and carotid arteries. . The intention was that the patient could subsequently undergo surgery to reconnect the pulmonary arterial branches and continue towards univentricular surgery.

**Result:** It was possible to suspend prostaglandin E<sub>1</sub>, maintain bilateral pulmonary blood perfusion with the consequent increase in oxygen saturation to 80%.

**Conclusion:** This unusual case shows that bilateral tandem ductal stenting in neonates is a treatment that can be provided in Ecuador. In the same way, it shows the reality of a developing country where specialists in pediatric interventional cardiology and pediatric catheterization laboratories are scarce, a situation that directly affects the quality, quantity and results of the treatment of patients with congenital heart disease. complex.

\*Contact: Avenida Colón y 6 de Diciembre. Hospital Pediátrico Baca Ortiz, E-mail: [pamereyes2591@gmail.com](mailto:pamereyes2591@gmail.com) , [riosmendez@intra-med.net](mailto:riosmendez@intra-med.net) Phone [593]: 0999825171 / 0967909536.

Mention: 2nd place clinical cases section  
Module: Pediatric Nephrology

## From Tubular Acidosis to Metabolic Alkalosis: Is it possible?

Sara Abigail Pillajo Escobar\*<sup>1</sup>, Franklin Orlando Loachamin Caiza<sup>1</sup>, Gina Susana Vivas Armas<sup>1</sup>



1. Pediatric Nephrology Service, Hospital of Specialties of the Armed Forces No. 1, Quito-Ecuador.

**Introduction:** Tubulopathies are a heterogeneous group of entities defined by abnormalities of tubular function. Renal tubular acidosis is characterized by hyperchloremic metabolic acidosis with normal Gap anion. Bartter syndrome is a rare entity defined by metabolic alkalosis. The coexistence of these two entities is very rare and a reason for reporting.

**Case report:** We present the case of a premature girl of consanguineous parents with polyhydramnios and well-documented tubular acidosis. When her clinical presentation changed, she was suspected of Bartter syndrome and was subsequently found to be a carrier of a homozygous pathogenic variant in the gene. KCNJ1, confirming the genetic diagnosis of Bartter syndrome type 2, which is inherited in an autosomal recessive manner.

**Result:** Bartter's Syndrome is a hereditary tubulopathy with alteration in the thick ascending branch of the loop of Henle, considered a rare disease (1 per million inhabitants), it has 2 phenotypes and six genotypes. Characterized by metabolic alkalosis failure of growth, in this case it presents debut as tubular acidosis, and

subsequent clinical change, this is congruent in this variant, later therapeutic as Bartter's Syndrome is indicated presenting improvement and clinical stability, until genetic confirmation. It is the first time that a diagnosis of this variant has been carried out in our country.

**Conclusion:** Early severe polyhydramnios without a habitual cause should lead to suspicion of Bartter's syndrome. Atypical tubulopathies benefit from genetic testing. Tubulopathies require specific diagnostic methods that allow timely and specific management by multidisciplinary teams, where the pediatrician takes on a notable relevance.

\*Contact: Queseras del Medio y Av. Gran Colombia, Hospital de Especialidades de las Fuerzas Armadas N°1, Email: [sarip993@gmail.com](mailto:sarip993@gmail.com) Phone: [593]: 09984048912.

Mention: 3rd place clinical cases section  
Module: Neuropediatrics

## Miller Fisher syndrome, Guillain Barré variant: case report

Gustavo Díaz<sup>1</sup>, Margarita Navarrete<sup>2</sup>, Gabriela Medina<sup>3</sup>, Darío Herrera<sup>3</sup>



1. Child Neurologist, "Enrique Garcés" General Hospital, Quito, Ecuador.

2. Pediatrician, "Enrique Garcés" General Hospital, Quito, Ecuador.

3. R4 of the Pediatrics postgraduate degree, Pontificia Universidad Católica del Ecuador, Quito, Ecuador.

**Introduction:** Miller Fisher Syndrome (MFS) is characterized by the triad of ophthalmoplegia, ataxia and areflexia, caused by autoimmune inflammation of the nerves secondary to an infection. The objective is to report the first confirmed case of this condition at the Enrique Garcés General Hospital (HGEG) and, in turn, to publicize the clinical presentation of this demyelinating neuropathy.

**Case report:** 11-year-old male adolescent with an 8-day history characterized by a moderate-intensity frontal headache that partially subsides with ibuprofen; on the 4th day it is accompanied by a deviation of the gaze to one side, occasional tinnitus, diplopia, general weakness, hyporexia and vomiting. Symptoms persist, he goes to the HGEG emergency, the physical examination of his admission shows right exo-tropia,

in extremities: altered tandem gait, conserved strength in upper limbs and decreased 4/5 in lower limbs, abolished patellar reflexes; admitted as suspicion of peripheral polyneuropathy. He remained hospitalized for 5 days, received immunoglobulin and corticosteroid with clinical improvement, progressive recovery of reflexes and upper limb strength and complete resolution of ophthalmoplegia on the 4th day of hospitalization.

**Result:** Hematic biometry, blood chemistry, normal liver function. Lumbar puncture without alteration. Electromyography of a mixed-mechanism motor-sensory polyneuropathy (axial and demyelinating) that affects the upper and lower limbs. Epstein Barr anti-bodies IgM positive and IgG negative. Anti-GQ1B positive anti-body. Simple MRI of the brain without alteration.

**Conclusion:** Guillain Barré Syndrome (GBS) is an acute inflammatory polyneuropathy of an autoimmune nature with multiple forms of manifestation, with SMF being the most frequent atypical variant, with greater frequency in men, of infectious etiology that must be considered within of the differential diagnosis of polyneuropathies, whose neurological examination is essential and the presence of the classic triad of ophthalmoplegia, ataxia and areflexia should be considered as MFS.

\*Contact: Avenida Enrique Garcés y Chilibulo, Hospital General Enrique Garcés. E-mail: [gkml92@gmail.com](mailto:gkml92@gmail.com) Phone [593]: 0939005743.

Mention: 1st place shared Scientific Works section.

Module: Neonatology

## Project "my family as part of my care" in the neonatal unit of the Metropolitan Hospital based on the philosophy "Family Center Care"

Janina Tatiana Ullauri Betancourt\*<sup>1</sup>, Paola Zurita<sup>1</sup>, Andres Zurita<sup>1</sup>, Karina Flores<sup>1</sup>.



1. Neonatology Unit, Hospital Metropolitano de Quito.

**Introduction:** The implementation of family care reduces the length of stay in the hospital for premature or sick babies, improving their well-being, reaffirming the bond between parents and children, allowing a better allocation of human resources, in Ecuador there is no Neonatology data that have projects that involve parents in the daily care of the critical baby, Parents experience anguish, frustration and loneliness if they are excluded from the process of caring for their sick newborns, However, if they are given the opportunity to participate during the process of medical care, daily care of the newborn, they can have a clear communication about the status of their baby, it also allows establishing a relationship of trust with the health personnel achieving that they experience satisfaction and less stress during this process.

**The objectives:** to compare days of hospital stay of patients under the scheme of the project, to evaluate parents' learning in neonatal resuscitation maneuvers, administration of medication, feeding and daily care of newborns, to establish reduction of days of phototherapy in the room in babies with hyperbilirubinemia.

**Methods:** A retrospective, analytical study was carried out.

**Results:** 3-day reduction in the days of hospitalization in those who were in the project, phototherapy in the room with the parents decreased to 1 day of treatment, 100% of the parents received cardiopulmonary resuscitation training basic, management of medication and basic care of the newborn.

**Conclusion:** The project "my family as part of my care" allows parents to be directly involved in the care of their children, offering a short hospital stay and the confidence to manage their pathologies at home.

\*Contact: Mariana de Jesús y Nicolas Arteta, Hospital Metropolitano de Quito. E-mail: [janytaub@hotmail.com](mailto:janytaub@hotmail.com) Phone [593]: 0998065747.

Mention: 1st place shared Scientific Works section.

Module: Nutrition-Endocrinology

## Factors associated with obesity in children between 5-12 years of age, "Carlos Andrade Marín" Hospital, 2018

Max Xavier Vintimilla Márquez\*<sup>1</sup>.



1. Pediatric Service of Hospital de Especialidades Carlos Andrade Marín.

**Introduction:** Overweight disorders (overweight and obesity) have become a public health problem worldwide, presenting an increase in both the adult and pediatric populations.

**Objective:** To determine the factors associated with obesity in children between 5-12 years of age who attend a pediatric outpatient clinic at the Carlos Andrade Marín Hospital during 2018.

**Methods:** A cross-sectional study was carried out in 195 patients from the Pediatric Outpatient Service of "Carlos Andrade Marín" Hospital. The variables studied were: nutritional status, age, sex, residence, exclusive breastfeeding, family functionality, Physical activity, Type of diet, watching television, family history of obesity and presence of co-morbidities.

**Results:** of the total of patients studied (n = 195), 56.4% correspond to males and 43.6% to females (P = 0.72), the prevalence of overweight and obesity was 13.3% and 10.2% respectively, the family history Obesity (P <0.001) was associated with excess weight, Hypercholesterolemia (P = 0.021) and Insulin Resistance (P <0.001) are more frequent in patients with excess weight.

**Conclusion:** The prevalence of overweight and obesity was 13.3% and 10.2% respectively, the family history of

obesity was associated with the development of excess weight in the children of this research.

\*Contact: Juncal 100 y Amesaba, Hospital de Especialidades Carlos Andrade Marín. Email: [mxvin2250@hotmail.com](mailto:mxvin2250@hotmail.com). Phone [593]: 0984523827.

Mention: 2nd place shared section Scientific works.  
Module: Neuropediatrics

## Longitudinal Retrospective Study on the Relationship between Autism Spectrum Disorder (ASD) and Epilepsy in a Pediatric Population in Quito-Ecuador.

Álvaro Nicolay Astudillo Mariño<sup>\*1</sup>, Patricia Erazo<sup>1</sup>, Elizabeth Nicole Garzón<sup>1</sup>.



1. Centro de Enfermedades Neurológicas y Nutricionales en Niños y Adolescentes (CENNA).

**Introduction:** Autism spectrum disorder (ASD) is more common in patients with epilepsy and epilepsy is more common in patients with ASD, with an incidence of approximately 20%. There is no plausible mechanism for ASD as a cause of epilepsy, however its co-occurrence is surely the result of predisposing factors for both conditions, including genetic and environmental factors. The objective of this study is to establish the prevalence of epilepsy in patients with ASD and find a correlation with other factors such as gender, etiology, type of seizure or epileptic syndrome, age of onset of epilepsy, EEG abnormalities and therapeutic response.

**Methods:** A retrospective longitudinal study was carried out based on the clinical records of the Center for Neurological and Nutritional Diseases in Children and Adolescents (CENNA) of 81 patients (3-19 years) with a diagnosis of ASD, where they were identified patients with epilepsy coexistence for a period of 6 years, and the different variables in this group.

**Results:** 81 patients with a diagnosis of ASD were identified, of which 12 patients (15%) presented coexistence of epilepsy. When analyzing the degree of ASD, it was evidenced that comorbidity in both entities is more common in ASD grade 3 (58.33%). The age of onset of epilepsy in the range between 5 to 10 years (42%). It

was evidenced that 25% of patients have a family history of epilepsy, while only 8% have a family history of ASD. All types of seizures occurred in patients with ASD, but the most common were focal-type seizures (58%), specifically motor seizures with altered consciousness (33%). In addition, there was a 100% improvement in autistic behavior in patients who received their antiepileptic treatment, and only 8% had difficult-to-control epilepsy.

**Conclusion:** The study showed a significant prevalence of epilepsy in the population diagnosed with ASD. To our knowledge, this is the first retrospective study in Ecuador that analyzes the comorbidity of ASD and epilepsy in the Ecuadorian population.

\*Contact: Diagonal a C.C El Bosque, 170509 Quito, Centro de Enfermedades Neurológicas y Nutricionales en Niños y Adolescentes (CENNA). E-mail: [nicoastudilloneuropedia@hotmail.com](mailto:nicoastudilloneuropedia@hotmail.com) Phone: [593]: 0993679799.

Mention: 2nd place shared section Scientific works.  
Module: Neuropediatrics

## Breastfeeding in newborns and infants with allergy to cow's milk proteins: a retrospective study.

Andrea Vásquez Montalvo<sup>1</sup>, Karina Elizabeth Flores-Santy<sup>1</sup>.



1. Pediatrics Postgraduate, Hospital Metropolitano, Quito, Ecuador

**Introduction:** Allergy to cow's milk protein (CMPA) is one of the first allergies to affect children, with a prevalence between 2 and 7.5% with an exponential increase in the last 2 decades. Although formulas are developed to be the most similar to breast milk, continuation of breastfeeding in children with CMPA is difficult. The objective of this study is to analyze adherence to breastfeeding and the main reasons for its discontinuation in children diagnosed with CMPA.

**Methods:** The clinical records and feeding schemes of 115 patients diagnosed with CMPA between 0-12 months of age who attended the Pediatric Gastroenterology service of the "Hospital Metropolitano de Quito" between 2016 and 2018 were analyzed. The

---

maintenance or suspension of breastfeeding was observed throughout the treatment and the cause of its suspension was described.

**Results:** At the time of diagnosis, 61% of the patients had mixed feeding, 29% were exclusively breastfed with breast milk, and 10% were exclusively fed infant formula. The main reason for suspending breast milk was medical indication, in 27.8% (n = 32). Other causes were difficulty adhering to the diet 28.69% (n = 33), difficulty expressing milk due to maternal labor 14.78% (n = 17), insufficient milk production 13.9% (n = 16), taking

medication -given by the mother incompatible with breastfeeding 6.08% (n = 7) other causes 8.69% (n = 10).

**Conclusion:** Maintaining breastfeeding can be challenging in patients with CMA, but can be achieved in almost 50% of patients. Tolerance to PLV is not influenced by the type of nutrition the baby receives at the beginning or at the end of treatment.

\*Contact: Mariana de Jesús y Nicolas Arteta. Hospital Metropolitano de Quito. E-mail: [avasconez924@gmail.com](mailto:avasconez924@gmail.com) Phone [593]: 0993543644.

---

## Editor's Note

The Ecuadorian Journal of Pediatrics remains neutral with respect to jurisdictional claims on published maps and institutional affiliations.

---