

## **Trabalhos Científicos**

- **Título:** Comparison Of Virological Diagnostic Methods In Acute Respiratory Infections: Experience Of The Pediatric Hospital "dr. Humberto J. Notti"
- Autores: Sandra Grucci; Luis LLano López; Pablo Melonari; Vanina Eibar; Luciana Martínez; Clara Pott Godoy; Adriana Recabarren
- Resumo: Introduction: Acute respiratory infections continue to be the main cause of morbidity and mortality in pediatrics, with viruses being the most frequent infectious agents. The rapid identification of viral infections allows us to control the nosocomial transmission of these pathogens. Objective: To compare the result obtained by two methods of viral identification in the period between December 2017 and June 2018. Materials and Methods: A direct immunofluorescence detection method was used analyzing 7 viruses (should list) with the respiratory panel and the BioFire® FilmArray® Respiratory Panel (BRP) that analyzed 17 viruses (adenovirus, human metapneumovirus, influenza viruses A [H1, H3, H1 2009], influenza B, parainfluenza viruses 1-4, coronaviruses (OC43, NL63, HKU-1, 229E), human rhinovirus/enterovirus, respiratory syncytial virus and 3 bacteria (Mycoplasma pneumoniae, Chlamydia pneumoniae, Bordetella pertussis). A total of 128 samples of nasopharyngeal aspirate (ANF) were analyzed in parallel from the critical services of the Hospital (Intensive Therapy, Neonatology, Cardiovascular Surgery and Oncology). Results: N: Of the 128 ANF samples, 21 (16%) were positive by direct immunofluorescence while 101 (78%) samples were positive with BRP. Because the BRP detects more etiological agents than the direct immunofluorescence panel, 22 ANF were excluded from the statistical test, where the BRP yielded pathogens not included in the immunofluorescence panel. Of the 106 remaining samples, the positive percent agreement between direct immunofluorescence and BRF was 26.5%. All samples negative by BRF were negative by direct immunofluorescence. The McNemar test was used to evaluate the concordance of the results, observing a statistically significant difference between both methodologies (p <0.05). Conclusion: BioFire® FilmArray® Respiratory Panel allowed the detection of viruses that previously were not possible, reducing the time required to report their presence and improving the quality of the medical service. The results obtained when comparing both methodologies showed unconformity that reached statistical significance.