

son similares en apariencia a las colonias de *Nocardia*: secas, rugosas y, por lo general, de color blanco o amarillo; sin embargo algunas se pueden volver marronáceas, rosas, naranjas o rojas después de varios días en las placas de cultivo. Las distintas especies de *Gordonia* pueden ser de crecimiento lento, por lo que las placas deben incubarse al menos durante 5 días<sup>8</sup>.

En la bibliografía consultada, no hemos encontrado ningún caso descrito de infección cutánea por *G. araii*, aunque sí por *G. terrae* en un chico de 15 años, siendo la vía de entrada de la infección similar a nuestro caso, el pinchazo con una espina<sup>9</sup>.

En la literatura se expone que no existe un enfoque estándar para el tratamiento de *Gordonia*, y que en muchas ocasiones las infecciones provocadas por estas especies no son informadas, seguramente debido a que no es posible su completa identificación mediante métodos convencionales. Así, sería recomendable apoyarse en los laboratorios de referencia para lograr la identificación de *Gordonia* y disponer de paneles de sensibilidad antibiótica y duración del tratamiento, para promover el diagnóstico, tratamiento y manejo clínico de este tipo de infecciones.

## Agradecimientos

Agradecemos al Dr. Juan Antonio Sáez Nieto y a la Dra. Gema Carrasco, del Laboratorio de Taxonomía Bacteriana del Centro Nacional de Microbiología del Instituto de Salud Carlos III, su colaboración en la identificación de la bacteria.

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## Considerations on antiviral treatment of suspected influenza infections in hospitalised children\*



## Consideraciones acerca del tratamiento de las sospechas de gripe en niños hospitalizados

Dear Editor,

NICE guidance in 2009 recommended oseltamivir treatment to all hospitalized children with suspected flu in the epidemic weeks, based on the possibility of influenza infection in children with compatible symptoms, is about 58%.<sup>1</sup> Recognizing that this may be overestimating the rate of influenza, they recommend further research into the probability that an influenza-like illness is true influenza. Since then, the recommendations have remained virtually unchanged.<sup>2</sup> The American Academy of Pediatrics (AAP) has also, this year, recommended treatment for all hospitalized children.<sup>3</sup> Rapid detection influenza tests have moderate sensitivity (50–70%). Therefore, antiviral treatment has been recommended even in cases with negative laboratory results. Oseltamivir has demonstrated to reduce the duration of symptoms, especially if it is administrated in the first 48 h of the illness with mild or nonexistent

\* This study has been partially supported by FIS (Fondo de Investigaciones Sanitarias – Spanish Health Research Fund) Grants N°: PI06/0532, PI09/00246, and PI12/01291.

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<http://dx.doi.org/10.1016/j.eimc.2016.02.006>

side effects. Its role to prevent complications is not enough proven. Summarizing, emergence of antiviral resistance is an important clinical and public health concern.<sup>4</sup>

In the Pediatric Department at the Severo-Ochoa Hospital in Spain, we conducted a prospective study of viral etiology of respiratory infection during seven consecutive seasons. Between December and February each season (12 weeks that included the epidemic peak), all children under 14 years hospitalized with criteria of suspected flu (febrile syndrome, upper or lower respiratory tract infection, bronchiolitis, wheezing episodes or pneumonia), were included in the study. In the 2009–10 season, patients were recruited from September to December, coinciding with the H1N1 pandemic. A total of 1612 cases were analyzed. Polymerase chain reaction for 17 respiratory viruses in nasopharyngeal aspirate was performed in the Respiratory Virus and Influenza Unit at the National Microbiology Center (ISCIII, Madrid, Spain).

Influenza viruses were detected in the 5.6–12% of cases, depending on the season, with the highest incidence corresponding to the H1N1 pandemic season (Fig. 1). The proportion of different viruses detected is shown in Table 1, being respiratory syncytial virus the most frequent. Following the current recommendations, 1477 children without influenza virus confirmed by laboratory, would had been treated with oseltamivir.

As other authors, we think that the greater value of using oseltamivir is to ensure it remains an effective defense against future seasonal and pandemic influenza viruses. Careful monitoring of levels of viral resistance in the circulating viruses combined with

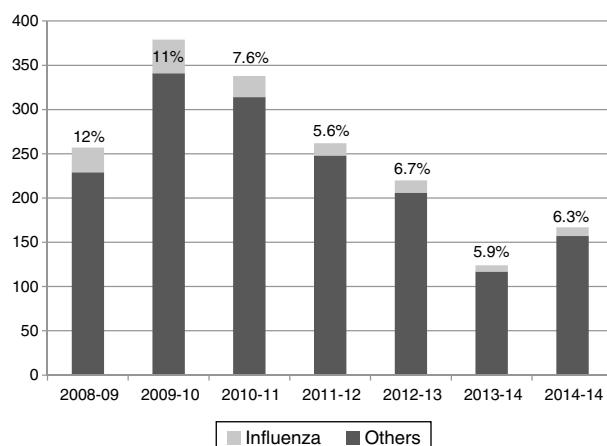
**Table 1**

Viruses detected by polymerase chain reaction in hospitalized children in the flu epidemic weeks.

	Number of identified virus (%)						
	2008-09	2009	2010-11	2011-12	2012-13	2013-14	2014-15
Months	D-F	S-D	D-F	D-F	D-F	D-F	D-F
Patients	229	341	314	248	206	117	157
RSV	121	102	99	121	87	68	89
Rhinovirus	64	118	63	56	61	27	44
Human bocavirus	24	41	45	33	16	7	7
Adenovirus	17	28	43	16	17	8	19
Parainfluenza (1, 2, 3, 4)	15	40	7	7	7	4	3
Human metapneumovirus	8	0	6	8	1	1	6
Influenza (A, B, C)	28	38	24	14	14	7	10
Enterovirus	9	7	2	5	7	1	4
Coronavirus	2	6	1	12	2	0	5
Negative	34	69	98	51	49	18	29

RSV: respiratory syncytial virus, D: December, F: February, S: September.

The number of total virus is superior to patients because the presence of co-infections.

**Fig. 1.** Influenza cases during the 12 weeks of highest incidence of flu, in hospitalized children.

the further development of new anti-influenza drugs might be the best way for control.<sup>5</sup> Based on our personal experience, we recommend making an effort to improve diagnosis in children with suspected influenza, performing molecular techniques or a rapid diagnostic test with high sensitivity,<sup>6</sup> especially in children with risk factors and children requiring hospitalization. This may help to guide treatment with oseltamivir to patients who really need it.

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<http://dx.doi.org/10.1016/j.eimc.2016.02.005>

## Evaluation of combined use of the MALDI-TOF and GenomEra MRSA/SA assay for the direct detection of methicillin resistance in *Staphylococcus aureus* from positive blood culture bottles



## Evaluación del uso combinado de ensayo de MALDI-TOF y Genomera MRSA/SA para la detección directa de la resistencia a la meticilina en *Staphylococcus aureus* de botellas de hemocultivo positivo

*Staphylococcus aureus* bacteremia has been associated with high mortality rates, prolonged hospitalization and increased economic cost. Delay in the initiation of appropriate antimicrobial

therapy is known to be an important determinant in clinical outcomes. Therefore, rapid identification of Staphylococcal species and susceptibility profiles in patients with bacteremia assist in the early optimization of therapy that would have a positive clinical impact.<sup>1–2</sup>

The aim of this study is to evaluate the *GenomEra MRSA/SA* assay in combination with MALDI-TOF MS for rapid detection of MRSA and MSSA in positive blood culture bottles.

The *GenomEra MRSA/SA Diagnose* (Abacus Diagnostica, Oy, Finland) is a fully automated closed tube PCR assay that simultaneously detects *S. aureus* specific DNA and a sequence within the *mecA* gene encoding for methicillin resistance with time-resolved fluorescence labels.<sup>3</sup> The sequence of the SA marker has not yet been published, but according to the manufacturer, it