Value of temperature for predicting invasive bacterial infection in febrile infants. A Spanish Pediatric Emergency Research Group (RISeuP-SPERG) Study *M. de la Torre¹, B. Gómez², R. Velasco³*

1. Pediatric Emergency Department, Niño Jesús University Hospital, Barakaldo, Spain. 3. Pediatric Emergency Department, Rio Hortega Universitary Hospital, Spain.

BACKGROUND

Infants ≤90 days old with fever without source (FWS) are in a higher risk of having an invasive bacterial infection (IBI) and a more aggressive management is usually recommended for this population. Few is known about the value of the fever degree for predicting the risk of IBI. Although most of the guidelines do not recommend modifying the management of these patients according to the fever degree, some authors recommend a different approach in well-appearing infant >28 days old depending on the maximum temperature detected.

OBJECTIVE

Our objective was to analyze the value of temperature for predicting an IBI or and herpes infection in wellappearing infants 29-90 days old with FWS.

METHODS

- Subanalysis of a prospective multicenter study.
- Carried out in 19 hospitals included in the Spanish **Pediatric Emergency Research Group (RISeuP-SPERG)** between October-2011 and September-2013.
- Including febrile infants ≤90 days old.
- Axillary or rectal temperature ≥38°C at home or in the emergency department was considered fever.
- An IBI was diagnosed when a single pathogen was isolated in blood or cerebrospinal fluid (CSF).
- Herpes infection was diagnosed when there was a positive chain polymerase reaction (CPR) for Herpes virus in blood or CSF.



						May 5 – 8, 20	18 Toronto Canada	
		The The	There were 17 IBI among W/A patients \leq 38.5°C					
			IBI	Sensitivity (CI 95%)	Specificity (CI 95%)	LR+ (CI 95%)	LR- (Cl 95%)	
		> 38.5°C	26 (2.6%)	0.61 (0.46-0.74)	0.56 (0.54-0.58)	1.38 (1.08-1.77)	0.70 (0.49-1.02)	
		> 39°C	13 (4.3%)	0.30 (0.18-0.45)	0.87 (0.85-0.88)	2.31 (1.45-3.69)	0.80 (0.66-0.98)	
		> 39.5°C	7 (7.6%)	0.16 (0.08-0.30)	0.96 (0.95-0.97)	4.23 (2.08-8.60)	0.87 (0.76-0.99)	



Pediatric Academic Societies Meeting

CONCLUSIONS

Temperature itself has a low accuracy for ruling out an IBI in well-appearing infants 29-90 days FWS. Temperature with old >39.5°C slightly increases the risk of having an IBI. Considering the prevalence in patients with lowest temperatures, we do not modifying the recommend these patients management of maximum according the to registered temperature.