



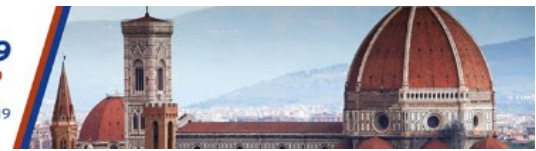
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Florence, Italy  
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# Suspected drug hypersensitivity reactions in children: Beta-lactams, NSAIDs and beyond

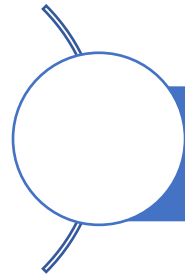
Teresa Toral Pérez<sup>1</sup>, Luis Moral Gil<sup>1</sup>, Nuria Marco Lozano<sup>2</sup>, Belén García-Avilés<sup>3</sup>

<sup>1</sup>Hospital General Universitario Alicante, <sup>2</sup>Hospital Vega-Baja Orihuela, <sup>3</sup>Hospital Clínico Universitario Sant Joan de Alicante



# Objective

- To know the drugs most frequently involved in the clinical suspicion of drug hypersensitivity in children
- To know their clinical manifestations
- To know how often this clinical suspicion is confirmed



# Material and methods

**2008**

**Drug involved  
Clinical symptoms  
Outcome of challenge test**

**2018**

**Retrospective review of  
medical records**

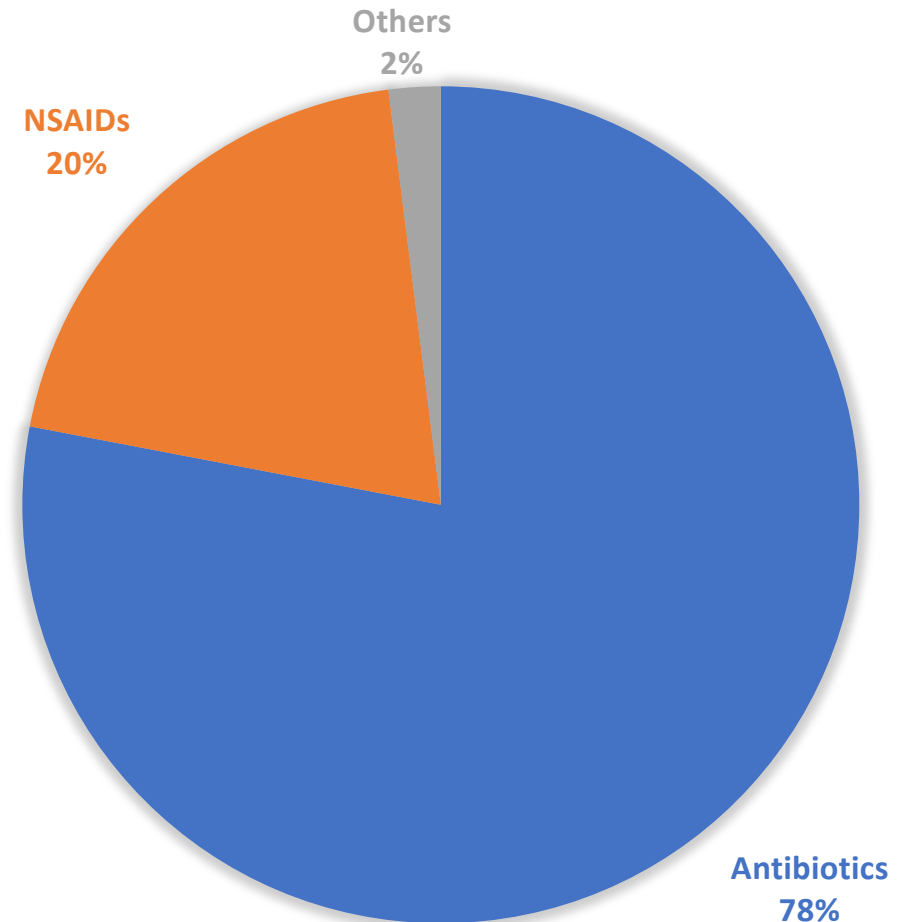


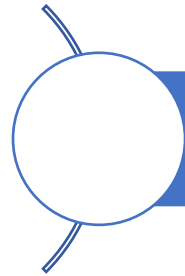
# Results

- 1185 reactions
- 1093 children (55 with more than one reaction )

## Others

Local anesthetics  
Vaccines  
Radiological contrasts  
Perianesthetic reactions  
Cytostatics  
Chlorhexidine





## Results: Clinical manifestations

- Mild cutaneous symptoms: 1149
- Anaphylaxis: 25
- Seizures: 5
- Non specific symptoms: 4
- SJS/NET: 2

# Results



**1185 reactions  
1093 children**

**78 rejected study**

**41 no challenge test**

**1077 drug challenge  
tests**

**52 Positive**

**1025 Negative**



# Results: No challenge tests

## 12 Severe reactions

- 2 SJS/TEN with acetaminophen/ibuprofen
- 4 anaphylaxis with ibuprofen
- 3 anaphylaxis with antibiotics ( 1 amoxicillin + positive skin test)
- 1 anaphylaxis with carboplatin + positive skin test
- 1 anaphylaxis with cisatracurium + positive skin test
- 1 seizure with cefotaxime

## 26 recurrent reactions with the same drug or positive skin tests and compatible symptoms

- 19 urticaria/angioedema with NSAIDs
- 5 delayed skin rashes with amoxicillin- clavulanic ( 1 positive skin test)
- 1 methotrexate and positive skin test
- 1 fixed drug eruption with TMP-SMX

3 reactions with drugs considered not useful



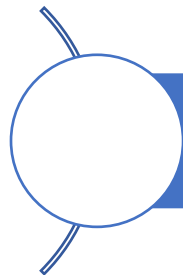
## Results: Challenge tests (1077)

**POSITIVE  
52**

- 26 NSAIDs (7 anaphylaxis, 19 cutaneous rashes)
- 24 antibiotics (cutaneous rashes)
- 2 clorhexidine (contact dermatitis)

**NEGATIVE 1025**





## Results: Delabeling

**1159 reactions**

**1023 negative: 86% total**

**92% studied**



# Conclusions

- Drug hypersensitivity reactions are a frequent reason for medical consultation in children but is rarely confirmed
- Antibiotics and non steroidal anti-inflammatory analgesics are the drugs most frequently involved in suspected hypersensitivity reactions in children
- Hypersensitivity was diagnosed more frequently in the group of anti-inflammatory drugs.



[teretoral@gmail.com](mailto:teretoral@gmail.com)