

## EMERGENCY MANAGAMENT: INTRODUCTION

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**Abstract:** The present article summarises the immediate management of vomiting in paediatric patients from the Paediatric Assessment Triangle approach, including the primary and secondary assessments of signs and symptoms for handling the situation properly. The relevant articles on the subject have also been updated.

**Keywords:** Uncertainty, Patient Prioritization, Paediatric nursing.

EMERGENCY MANAGAMENT: INTRODUCTION

## MANEJO EN URGENCIAS: INTRODUCCIÓN

**Resumen:** En este artículo se realiza una síntesis del abordaje inmediato del paciente pediátrico ante una situación de vómitos desde el enfoque del triángulo de evaluación pediátrica, incluyendo la valoración primaria y secundaria de los signos y síntomas para un adecuado manejo de la situación. Se ha realizado una actualización de artículos referentes en la temática.

**Palabras clave:** Incertidumbre, Prioridad del Paciente, Enfermería Pediátrica.

## GESTÃO NAS URGÊNCIAS: INTRODUÇÃO

**Resumo:** Neste artigo é apresentada uma síntese da abordagem imediata do doente pediátrico numa situação de vómitos a partir da abordagem do triângulo de avaliação pediátrica, incluindo a avaliação primária e secundária dos sinais e sintomas para uma adequada gestão da situação. Foi feita uma atualização de artigos de referência relacionados com o tema abordado.

**Palavras-chave:** Incerteza, prioridade do doente, enfermagem pediátrica.

## EMERGENCY MANAGEMENT: INTRODUCTION

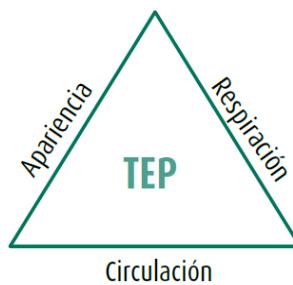
### IMMEDIATE MANAGEMENT

Managing uncertainty in paediatrics is a challenge for any clinician. Being able to discern between low complexity cases, with more or less complex features, and the cases that require supervision by a specialist (or which represent a threat) is a very frequent problem in primary care.

The Paediatric Assessment Triangle (PAT) attempts to systematise the concept of “great diagnostician” attributed to the clinical expert. This is a useful, quick, and simple assessment method that identifies the type and severity of the problem and prioritises the initial treatment (Figure 1. The Paediatric Assessment Triangle (PAT)).

The PAT formally categorises the general impression of the patient’s condition in line with the fact that emergency management requires a shift in approach in order to focus on what the patient needs rather than on what the patient has.

*Figure 1. The Paediatric Assessment Triangle (PAT)*



Spanish	English
TEP	PAT
Apariencia	Appearance
Respiración	Breathing
Circulación	Circulation

The TAP is based on audio-visual examination, without using hands or any other element. The assessment of the appearance, the analysis of the work of breathing, and the appearance of the skin as indicators of circulatory status make up the three sides of the triangle.

The approach of these bulletins is focused on patients with a stable clinical situation in which primary and secondary assessments will allow us to follow an effective and purpose-oriented therapeutic approach in the majority of cases (Horeczko, Enriquez, McGrath, Gausche-Hill, & Lewis, 2013).

## EMERGENCY MANAGEMENT: INTRODUCTION

### DEVELOPMENT

Appearance assesses tone (if the child moves spontaneously, resists examination, is seated or standing, etc.), interactiveness (if the child is alert and connects), consolability, look/gaze (if the child makes contact, if there is visual tracking), and speech/crying (loud crying, inappropriate words, etc.).

The analysis of the work of breathing consists of observing the position adopted by the child (on a tripod, not tolerating decubitus, etc.), any pulling, nasal flaring, or head nodding, as well as any abnormal respiratory noises (whimpering, hissing, nasal voice) that can be heard without the need for auscultation with a stethoscope.

Circulatory status is assessed based on the appearance of the skin: Is there pallor? Is it cyanotic? Does it present with cutis marmorata (a marble-like complexion)?

These factors provide a benchmark for cardiac output and organ perfusion (Carles Luaces Cubells, Montse Delgado Maireles, Yolanda Fernández Santervás, 2015)(Cázares-Ramírez & Acosta-Bastidas, 2014).

### CLINICAL ORIENTATION: SUMMARY

*Table 1. Orientation according to the PAT*

Appearance	Work of breathing	Circulation	Clinical orientation
N	N	N	Stable
A	N	N	CNS dysfunction
N	A	N	Shortness of breath
A	A	N	Respiratory failure
N	N	A	Compensated shock
A	N	A	Decompensated shock
A	A	A	Cardiopulmonary failure

\* (N: Normal; A: Altered)

Source: Carles Luaces Cubells, Montse Delgado Maireles, Yolanda Fernández Santervás, 2015

### PRIMARY AND SECONDARY ASSESSMENTS

Primary paediatric assessment uses the Airway, Breathing, Circulation, Disability, Exposure (**ABCDE**) approach for assessment and management.

Primary paediatric assessment is a practical assessment of respiratory, cardiac, and neurological function, including assessment of vital signs and determination of oxygen saturation (Cázares-Ramírez & Acosta-Bastidas, 2014).

This part of the primary evaluation includes the following (Table 2. Management summary):

## EMERGENCY MANAGEMENT: INTRODUCTION

- ABCDE assessment:
  - Intervention/action: initiation of treatments
  - First letter in each of the sections.
  - Identification of threatening problems: categorisation

In this method, thorough examination (use of hands) is added to observation.

- Secondary evaluation focuses on a slower management where information is collected from secondary sources and a recapitulation is made. An acronym allows us to do it in an orderly way: the **SAMPLE history** (Storch de Gracia Calvo P, 2015):

**S:** signs and symptoms.

**A:** allergies.

**M:** medications.

**P:** pertinent past medical history.

**L:** last oral intake.

**E:** events leading to present illness/injury. This must include the mechanism of the injury, the time it occurred, and what happened until the child became cared for.

This gives way to a complete examination and assessment of the patient's situation and whether there is a need for transfer to or management at another level of care.

*Table 2. Management summary*

<b>The Paediatric Assessment Triangle (PAT)</b>
<ul style="list-style-type: none"> <li>▪ Shortness of breath</li> <li>▪ Circulation: skin colour</li> <li>▪ Neurological status: appearance/behaviour</li> </ul>
<b>Primary assessment: ABCDE</b>
<ul style="list-style-type: none"> <li>▪ A: patent airway and cervical stabilisation</li> <li>▪ B: ventilation and oxygenation</li> <li>▪ C: circulation and haemorrhage control</li> <li>▪ D: neurological dysfunction</li> <li>▪ E: exposure</li> </ul>
<b>Secondary assessment</b>
<ul style="list-style-type: none"> <li>▪ SAMPLE history</li> <li>▪ Complete physical examination</li> <li>▪ Complementary tests</li> </ul>
<b>Categorisation and transport</b>
<ul style="list-style-type: none"> <li>▪ Paediatric Trauma Index (PTI)</li> <li>▪ Transfer</li> </ul>

Source: Storch de Gracia Calvo P, 2015

## EMERGENCY MANAGEMENT: INTRODUCTION

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## EMERGENCY MANAGEMENT: INTRODUCTION

### RINSAD

*The Journal of Childhood and Health (Revista Infancia y Salud - RINSAD)*, ISSN: 2695-2785, arises from the collaboration between the administrations of Portugal, Galicia, Castilla y León, Extremadura, and Andalusia, within the [Interreg Spain-Portugal RISCAR](#) project, and aims to disseminate scientific articles on children's health, providing researchers and professionals with a scientific base from which to learn about the latest advances in their respective fields.

The two main target audiences of RINSAD are:

- a) Researchers in the field of childhood and health.
- b) Professionals in the sector.

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