



Abdominal pediatric bicycle handle trauma: Experience at a Colombian pediatric reference center.

Maria Eugenia Ruiz – Botero MD¹, Maria Daniela Moreno-Villamizar MD¹, Ivan Dario Molina MD, MSc¹, Juan Javier Valero-Halaby MD¹
¹ Universidad Nacional de Colombia – Hospital de la Misericordia (HOMI)

Introduction

Up to **5%** of trauma related to bicycles. More than **40%** involve abdominal injuries. Management depends on clinical presentation and nature of injuries.



Little information available in our region related to this topic



To describe the **clinical characteristics and experience in treatment** in pediatric patients with abdominal trauma due to bicycle handle

Methods



Retrospective case series



Pediatric patients at HOMI 2010 - 2024



Measures of central tendency and percentages.

Results

Demographics



21 children



Mean age: 10 years old



15% F
85% M



Follow up: 59 days



Consultation time: 75 hrs

Diagnostic approach



57%
(58%)



80%
(70%)

Positive findings (n=14)



35%



21%



28%



7%



7%

Sing/Symptom	N (%)
Tachycardia	12 (57%)
Tattoo	12 (57%)
Peritoneal irritation	4 (19%)
Altered Hb	7 (33%)
Altered liver workup	5 (23%)

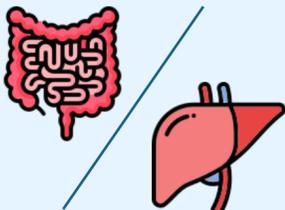
Intervention	N (%)
Laparotomy	5 (42.8%)
Intestinal resection/Anastomosis	3 (60%)
Intestinal suture	2 (40%)
Laparoscopy	3 (28.5%)
Intestinal suture	1 (33%)
Intestinal resection/Anastomosis	1 (33%)
Negative	1 (33%)
Percutaneous (Pancreatic pseudocyst drainage)	1 (7.1%)

! Complications n=3 (21%): Surgical site infection n=2 (14%); bleeding n=1 (7%)
Deaths: 0%

Conclusions:



Our patients consult later (75 hrs vs 35 hrs)



Grater incidence of bowel injury



Minimally invasive surgery and observation are safe in selected patients



Low incidence of complications



jjvaleroh@unal.edu.co
marruizbo@unal.edu.co