Abstracts

the hospital for delivery. VitaminD level was performed by enzyme immunoassay kits. The concentration of uric acid was determined spectrophotometrically.

Results In patients with severe preeclampsia revealed: a pronounced deficiency of vitamin D, a tough hyperuricemia, had higher numbers mean arterial pressure during labor epidural analgesia in the background. The results also gave evidence to suggest that patients with preeclampsia who have previously been registered low levels of vitamin D and an increased concentration of uric acid in the birth have a greater need for a local anesthetic to reduce pain and stabilize blood pressure than patients with higher levels of vitamin D and smaller uric acid.

Conclusions In women with preeclampsia during childbirth epidural analgesia, low levels of vitamin D and hyperuricemia are associated a higher demand for local anesthetics.

Pediatric

126

PERSISTENT OPIOID USE AFTER PEDIATRIC FRACTURE TREATMENT

¹KR DelPizzo*, ²C Cozowicz, ¹H Zhong, ²HN Ladenhauf, ¹LA Wilson, ¹J Liu, ³J Poeran, ^{1,2}SG Memtsoudis. ¹Hospital for Special Surgery, New York, USA; ²Paracelsus Medical University, Department of Anesthesiology, Perioperative Medicine and Intensive Care Medicine, Salzburg, Austria; ³Institute for Healthcare Delivery Science, Department of Population Health Science and Policy, Icahn School of Medicine at Mount Sinai, New York, USA

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Background and Aims The opioid epidemic persists as one of the most critical public health concerns in the United States. In the pediatric population, fractures are among the primary causes for surgical interventions. Therefore, the identification of opioid prescription patterns and potential risk factors for prolonged opioid use is critical.¹

We hypothesized that the numbers of pediatric patients with persistent opioid use after surgery would be significant and that several risk factors driving persistent opioid use could be identified.

Methods A retrospective population-based cohort study was conducted. National claims data from the Truven Health MarketScan database were utilized to 1) characterize opioid prescription patterns, and 2) describe the epidemiology and risk factors for single use as well as persistent use of

Abstract 126 Figure 1

Abstract 126 Table 1 Patient characteristics by opioid prescription

	Opioid prescribed after surgery	No opioid prescribed after surgery	Overall	p-value
N (%)	65,331 (21.54)	238,004 (78.46)	303,335	
Age group, n (%)				<.001
0-5 years	6073 (14.0)	37,287 (86.0)	43,358 (14.3)	
6-12 years	19,228 (15.1)	107,972 (84.9)	127,200 (41.9)	
13-18 years	27,697 (26.8)	75,571 (73.2)	103,268 (34.0)	
19-21 years	12,335 (41.8)	17,174 (58.2)	29,509 (9.7)	
Gender, n (%)				<.001
Male	43,862 (23.1)	146,309 (76.9)	190,171 (62.7)	
Female	21,469 (19.0)	91,695 (81.0)	113,164 (37.3)	
Year, n (%)				<.001
2013	22,850 (21.4)	84,089 (78.6)	106,939 (35.3)	
2014	19,921 (19.1)	84,651 (80.9)	104,572 (34.5)	
2015	10,574 (25.3)	31,164 (74.1)	41,738 (13.8)	
2016	8053 (24.9)	24,330 (75.1)	32,383 (10.7)	
2017	8933 (22.0)	13,770 (77.8)	22,703 (5.8)	
Preoperative Opioid utilization				<.001
No opioid filled before surgery	49,725 (18.8)	214,218 (81.2)	263,943 (87)	
Opioid filled only between fracture diagnosis and surgery	8645 (13.6)	14,326 (62.4)	22,971 (7.6)	
Opioid filled before fracture diagnosis	6961 (42.4)	9460 (57.6)	16,421 (5.4)	
Previous anxiolytics medication use, n (%)				<.001
Yes	2772 (42.8)	3700 (57.2)	6472 (2.1)	
No	62,559 (21.1)	234,304 (78.9)	296,863 (97.9)	
Previous antidepressant medication use, n (%)				<.001
Yes	2836 (43.0)	3757 (57.0)	6593 (2.2)	
No	62,495 (21.1)	234,247 (78.9)	296,742 (97.8)	
Days index, n (%)				<.001
0	56,415 (21.6)	204,731 (78.4)	261,146 (86.1)	
1	8231 (20.8)	31,378 (79.2)	39,609 (13.0)	
2	467 (25.8)	1340 (74.2)	1807 (0.6)	
3+	218 (28.2)	555 (71.8)	773 (0.3)	
Obesity, n (%)				0.005
Yes	1575 (20.6)	6073 (79.4)	7648 (2.5)	
No	63,756 (21.6)	231,931 (78.4)	295,687 (97.5)	
Type of procedure, n (%)				<.001
Closed	42,459 (16.1)	221,241 (83.9)	263,700 (86.9)	
Open	22,872 (57.7)	16,763 (42.3)	39,635 (13.1)	
Place of procedure, n (%)				<.001
Inpatient	5189 (60.7)	3361 (39.3)	8552 (2.8)	
Outpatient	29,058 (35.8)	52,196 (64.2)	81,254 (26.8)	
ER/Urgent care	11,382 (32.1)	24,021 (67.9)	35,403 (11.7)	
Physician office	11,731 (7.4)	147,082 (92.6)	158,813 (52.4)	
Other	7971 (41.3)	13,342 (58.7)	21,313 (6.4)	
Time from fracture onset to procedure (days), median (IQR)	0 [0, 3]	0 [0, 3]	0 [0, 3]	0.018

opioids among pediatric patients with surgical fracture treatment.

Results Among 303,335 patients, 21.54% received at least 1 opioid prescription within 6 months after surgery, and 1,671 (0.6%) developed persistent opioid use. Risk factors for persistent opioid use included older age, female gender, lower extremity trauma, surgeries of the spine, rib cage or head, closed fracture treatment, earlier surgery years, previous use of opioid, and higher comorbidity burden.

Conclusions Among a cohort of pediatric patients who underwent surgical fracture treatment, 21.5% filled at least 1 opioid prescription, and 0.6% (n=1,671) filled at least one more opioid prescription between 3 to 6 months after surgery. Understanding the risk factors associated with persistent opioid use in pediatric patients is critical for the development of prevention strategies in this patient population.