

Topical Analgesics In Children

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Disclosures

- Consultant

- Pfizer
- GSK
- Endo Pharmaceuticals
- Physicians Medical Marijuana Board State of CT

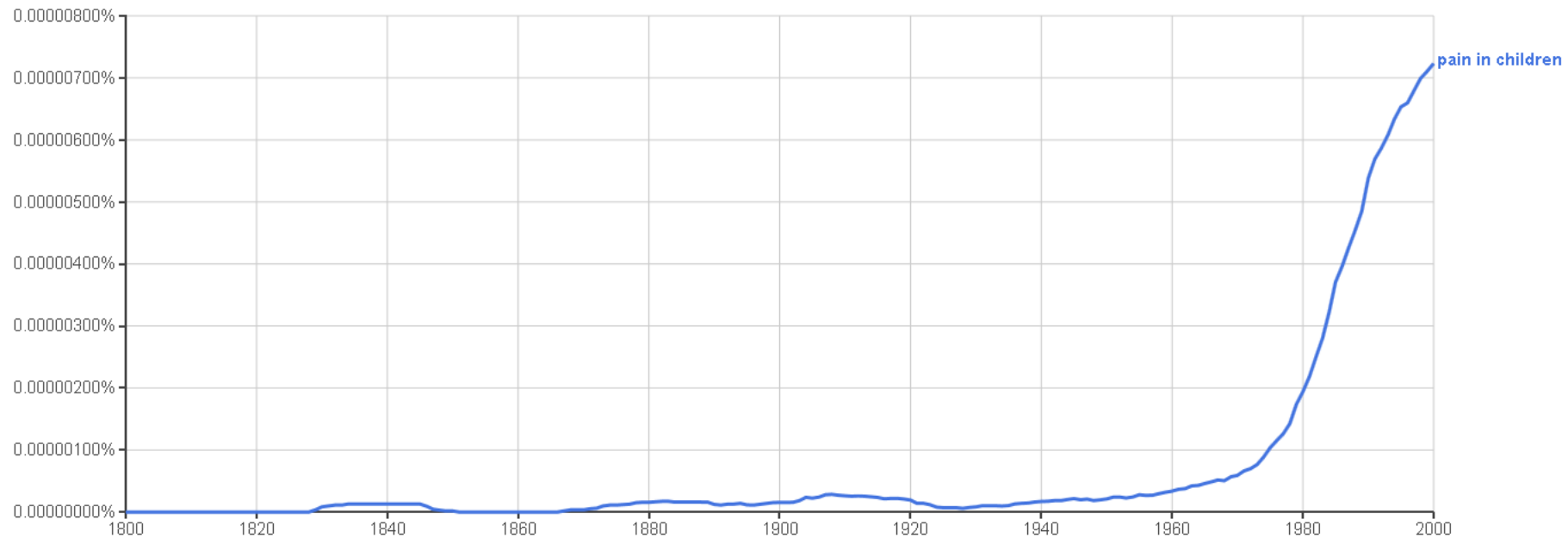
- Grant Funding

- DOD
- NICHD
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Pediatric Pain- a brief history

- As recently as the 1980's children did not receive INTRAOPERATIVE ANALGESIA FOR MAJOR Surgeries. Postop analgesia nonexistent
- Infants (voiceless); depending on discipline, over 20% of clinicians thought INFANTS DO NOT FEEL PAIN
- ANALGESICS FELT TO BE TOO STRONG
- Pain of procedures (immunizations, venous access, arterial sticks, chest tube insertions, circumcisions, heel sticks) rarely considered despite frequency of occurrence
- Chronic pain not recognized

TERM “PEDIATRIC PAIN” IN LITERATURE



STILL

- The word children appears only 6 times in the National Pain Strategy, no pediatric pain experts on advisory board
- Children and pediatric pain experts left off of CDC OPIOID GUIDELINES
- Despite FDA guidelines and incentives most analgesics have not received sufficient study to validate safety and efficacy in children.
- Many children receive inadequate pain treatment due to a combination of lack of knowledge, data, disregard for the impact of short and long-term effects of untreated pain, and fear.

Pediatric pain

- Acute pain
 - Injury
 - Post-operative
 - Procedural
 - Disease-related
- Chronic Pain – 30% of youth
- Disease-related. Arthritis, Cancer, Sickle Cell, IBD
- Non disease related - Headache, Abdominal Pain, Widespread musculoskeletal pain
 - \$19 billion per year High Impact Chronic Pain
 - Pain related disability
 - Academic deterioration
 - Significant School absence
 - Behavioral Health comorbidity
 - Social difficulties
 - Family strife
- Treatment is multidisciplinary (CBT, PT) and non interventional

Analgesics in Children

- No analgesics demonstrated to be effective for chronic pain
- High incidence of side effects for adjuvants
- Parents are very reluctant to have their child on systemic medication especially given the opioid epidemic

My Philosophy for Chronic Pain Treatment in Youth

- Safe

- Reasonable course of treatment
- Shouldn't break the bank

Topical analgesics

- My early career was focused on study of topical anesthetics for minor procedures
- My interest in topical drug delivery and need to find safe effective treatments for chronic pain have lead me to utilize compounded medications
- Have written extensively on topical anesthetics and analgesics
- Have used both FDA approved topical lidocaine patches (Lidoderm) and diclofenac gel (Voltaren) in children and adolescents
 - Though neither have been studied nor approved in this population for any indication

Compounded Topical Analgesics

- Have mostly utilized topical ketamine alone or in combination with amitriptyline over a period of 20 years
- My philosophy has been to limit polypharmacy within compounded drugs to 1) limit side effects 2) minimize multiple drug exposure 3) have some sense of what I am doing
- Use a local compounding pharmacy exclusively who price their compounded medications reasonably
 - Have been detailed or received mailings for larger compounding pharmacies
- Utilize for variety of conditions mostly localized chronic pain
 - CRPS, joint pains associated with WMSP, incisional pain
- No significant safety events
- Success is entirely anecdotal
 - Minimal literature especially in children

“Be kind, for everyone you meet is fighting a hard battle”