

SALA POLISSENA A
PIANETA DOLORE

Moderatori: Margherita Maragno – Daniela Pierluigi

Egidio Barbi

Gestione del dolore inespresso:
il non detto non esiste?




Gestione del dolore inespresso: il non detto non esiste ?

E. Barbi, IRCCS Burlo Garofolo, Università di Trieste



Recurrent pain in a child with cerebral palsy: Questions

Andrea Trombetta¹ · Simone Benvenuto¹  · Egidio Barbi^{1,2}

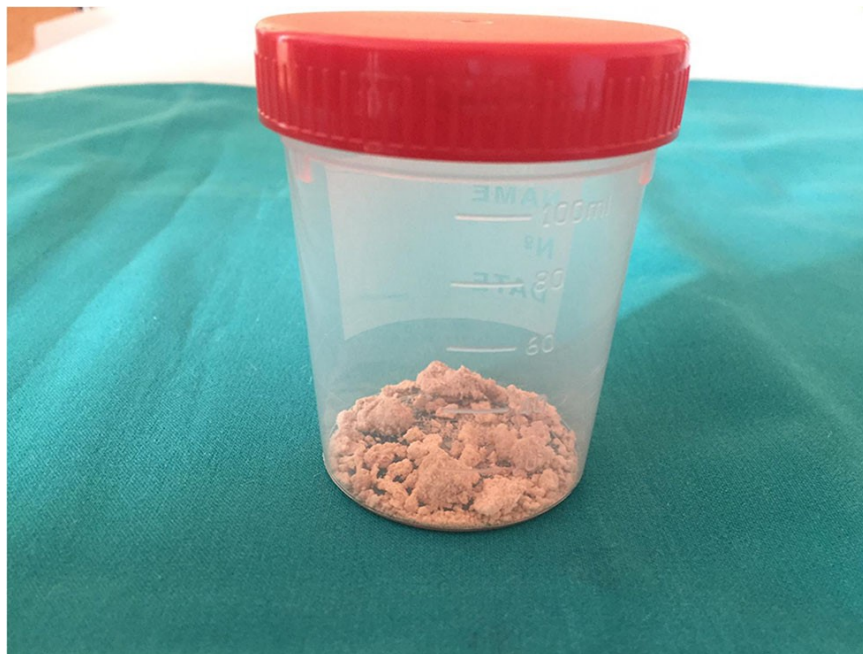
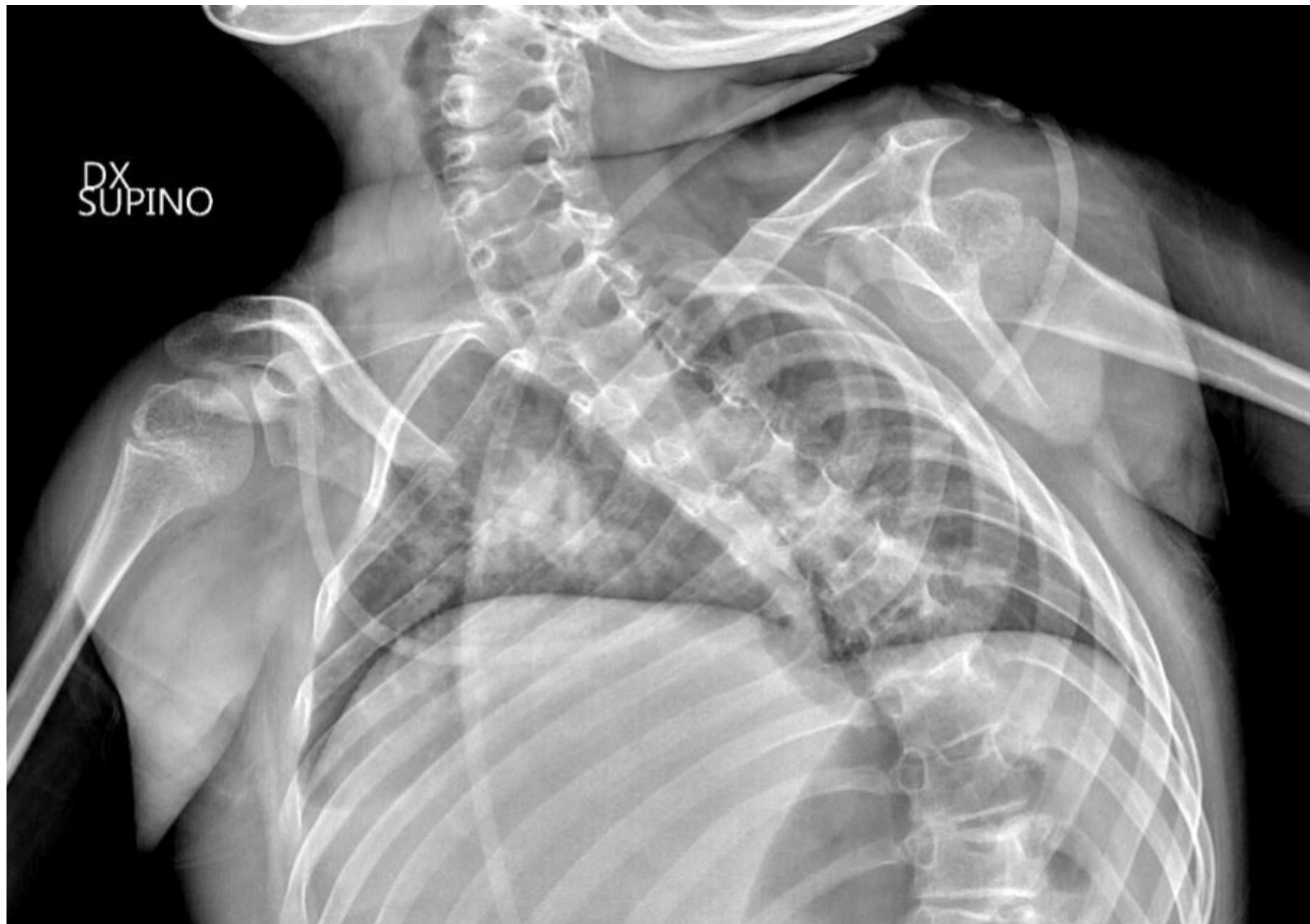


Fig. 1 Brownish aggregates found in the child's diaper

itant epilepsy [2]. Struvite stones, in particular, are a subset of kidney stones, composed of magnesium ammonium phosphate (struvite) and calcium carbonate-apatite, which form as a result of urinary tract infections (UTIs) with urease-producing pathogens. It is known that this type of stone is formed quickly, within a few weeks, in the presence of urease-producing bacteria [3], from genera such as *Proteus*, *Providencia*, *Klebsiella*, or *Staphylococcus*. When the production of ammonia increases

DX
SUPINO



SN





I bambini con deficit cognitivo possono avere le stesse cause di dolore

Dei bambini con sviluppo intellettivo normale:

- Otite
- Faringite
- Mestruazione
- Cefalea
- Appendicite acuta
- Torsione testicolare/ovarica. >>> **rischio molto alto ovariectomia**

Ma hanno anche cause specifiche che il medico deve sospettare e riconoscere

Hauer J et al. Pain Assessment and Treatment in Children With Significant Impairment of the Central Nervous System. Pediatrics. 2017;139:e20171002

The Incidence of Pain in Children With Severe Cognitive Impairments

Lynn M. Breau, PhD; Carol S. Camfield, MD, FRCPC; Patrick J. McGrath, PhD; G. Allen Finley, MD, FRCPC

Children with cognitive impairment experience more pain than healthy pairs

Children had pain at least 1 day each week and spent an average of 9 to 10 hours per week in pain

Children with more severe physical and cognitive impairments experience the worst pain



OPEN ACCESS

Pain in young people aged 13 to 17 years with cerebral palsy: cross-sectional, multicentre European study

Kathryn N Parkinson,¹ Heather O Dickinson,¹ Catherine Arnaud,² Alan Lyons,³ Allan Colver,¹ on behalf of the SPARCLE group

There are many potential causes of pain in cerebral palsy:

- muscle spasms or contractures
- hip subluxation
- bone fractures and osteoporosis
- constipation
- tooth decay
- esophagitis and intestinal motility disorders
- assistive devices

Pain due to medical procedures represents nearly 10% of pain episodes

The evaluation of acute pain in individuals with cognitive impairment: A differential effect of the level of impairment

Ruth Defrin ^{a,*}, Meir Lotan ^b, Chaim G. Pick ^b

Individuals with cognitive impairment are prescribed significantly less analgesic medications compared with cognitively intact ones

They often experience delayed diagnosis and management of painful medical conditions

Children often are unable to verbalize their pain and may exhibit uncommon behaviors such as the “freezing reaction” or self-injury or aggression»

LIMITS IN PAIN MEASUREMENT



- Reduced communication skills
- Atypical pain induced behavior (freezing, full blown smile)
- Expressive ambiguity



NEED FOR SPECIFIC
ALGOMETRIC
SCALES



BEHAVIORAL
INDICATORS



PHYSIOLOGICAL
INDICATORS

Vocal

- Moaning, whining, whimpering (fairly soft)
- Crying (moderately loud)
- Screaming or yelling (very loud)
- A specific sound or vocalization for pain

Social

- Not cooperative
- Less interaction
- Seeks comfort
- Difficult to comfort

Facial

- Furrowed brows
- Change in eye position, wide, eyes closed
- Turn down mouth
- Lips puckered
- Clenches or clenched

Activity

- Not moving, less active, quiet
- Jumping around, agitated, fidgety

Body and limbs

- Floppy
- Stiff, spastic, tense, rigid
- Gestures to or touches part of body that hurts
- Protects, favors or guards part of body that hurts
- Flinches or moves away part of body that hurts
- Moves in specific way to show pain

Physiologic signs

- Shivering
- Change in color, pallor
- Sweating, perspiring
- Tears
- Sharp intake of breath, gasping
- Breath holding

American Society of Anesthesiologists, Inc. Lippincott Williams & Wilkins, Inc.

Managing Children's Pain

RESEARCH

Open Access



Validation of the Italian version of the Non-Communicating Children's Pain Checklist-Postoperative Version

C. Zanchi¹, M. Massaro², G. Ferrara^{2,4*}, M. Montico¹, F. D'Ossualdo³, R. Rutigliano¹, A. Taddio^{1,2}, L. Vecchi Brumatti¹, G. Cozzi¹ and E. Barbi¹

The extent of the problem

Situation

- Consultations, examinations, tests & scans
- One-day stays in hospital
- Overnight stays in hospital
- Emergency room visits
- Surgical interventions
- Drawing blood

Times a year

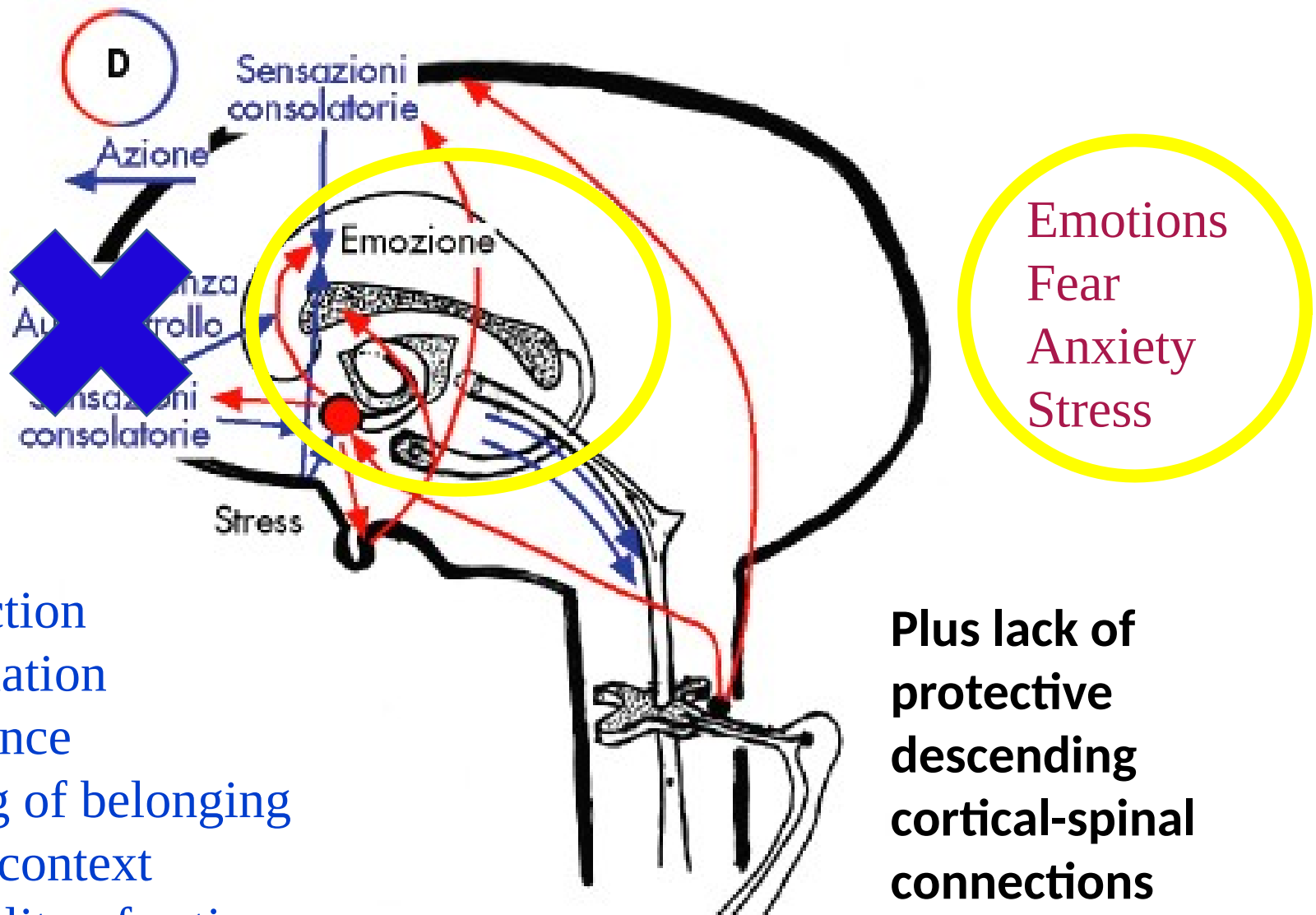
68
7
63
15
4
32

**189 x
restraint
used on my
daughter in
1 year!**

= every day for 6 months...

“I don’t have time to discuss how we’re going to do this. If you would just hold her tightly, I will take the X-ray. She won’t remember it anyway.”

– quote from a radiology nurse



**SOME SPECIFIC ISSUES ON PAIN IN PAEDIATRICS:
SUMMARY AND REVIEW OF THE PRESENT KNOWLEDGE AND PRACTICE**
(*Medico e Bambino* 2010;29:289-297) FRANCO PANIZON¹, EGIDIO BARBI²



Needle-related pain and distress management during needle-related procedures in children with and without intellectual disability

Paola Pascolo¹  & Francesca Peri¹ & Marcella Montico² & Mishelle Funaro¹ & Roberta Parrino³ & Francesca Vanadia⁴ & Francesca Rusalen⁵ & Luca Vecchiato⁶ & Franca Benini⁷ & Sabrina Congedi⁸ & Egidio Barbi^{9,10} & Giorgio Cozzi⁹

Received: 12 April 2018 / Revised: 6 August 2018 / Accepted: 29 August 2018

Springer-Verlag GmbH Germany, part of Springer Nature 2018

Prospective observational, operator blind, multicenter study

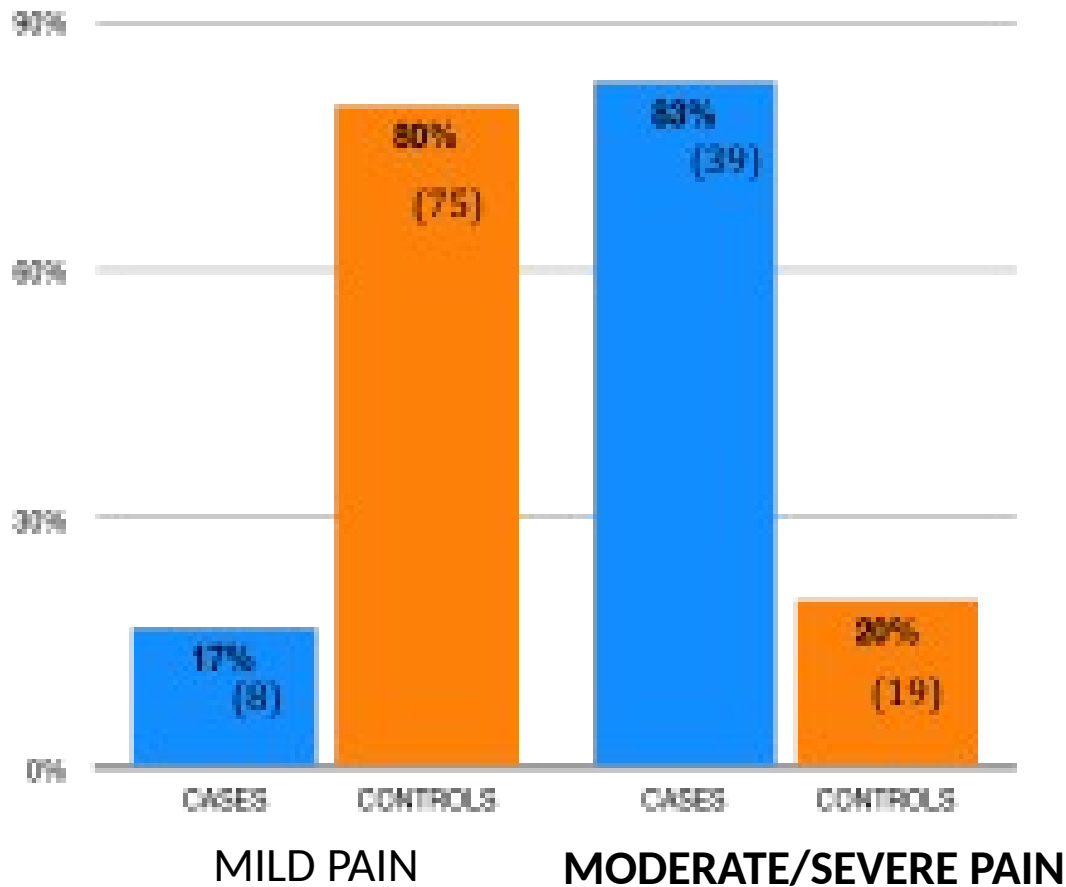
47 children with cognitive impairment

94 healthy children as controls

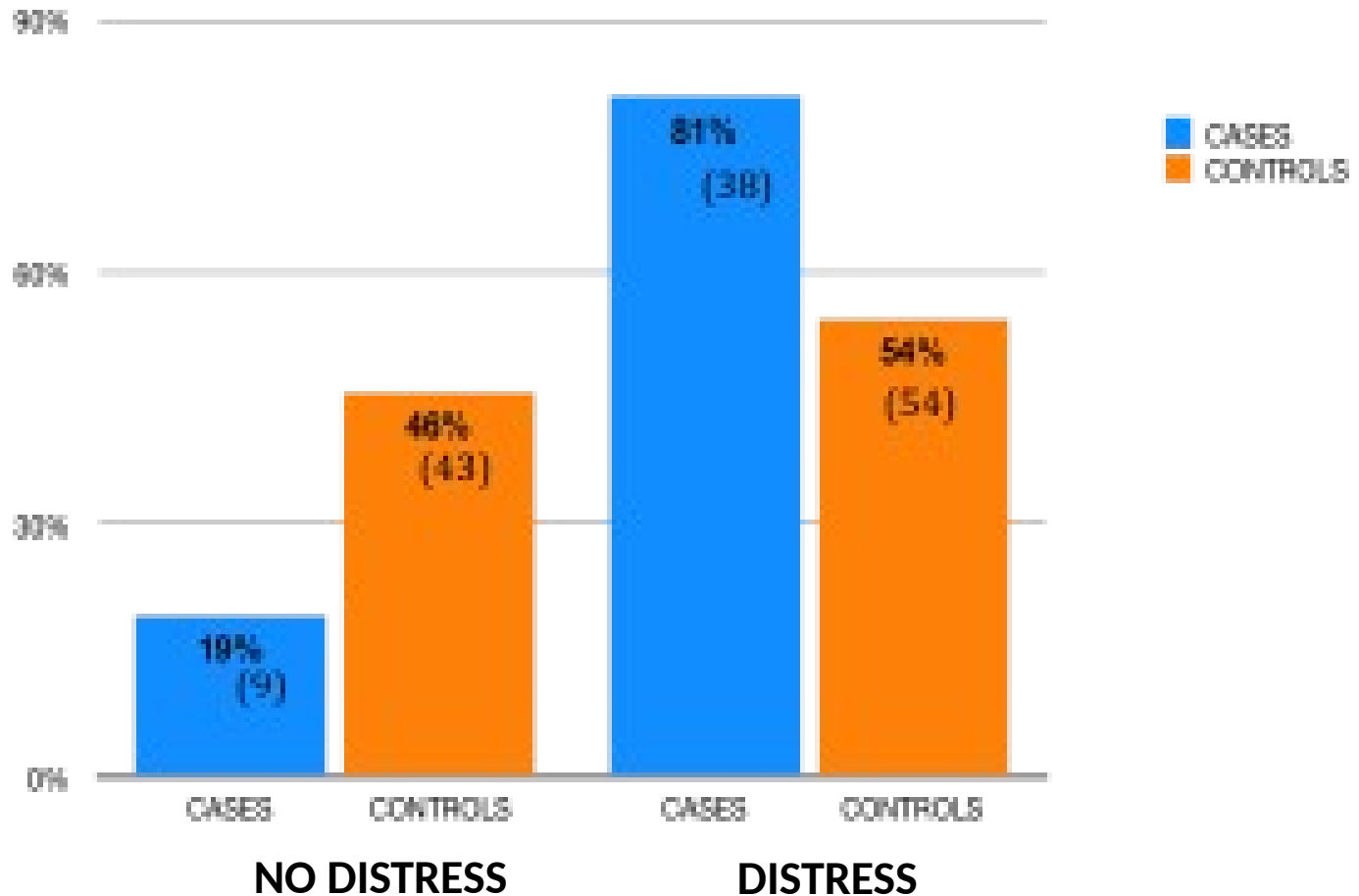
Main outcome : number of techniques applied to reduce pain and distress

Secondary outcome : evaluation of pain and distress

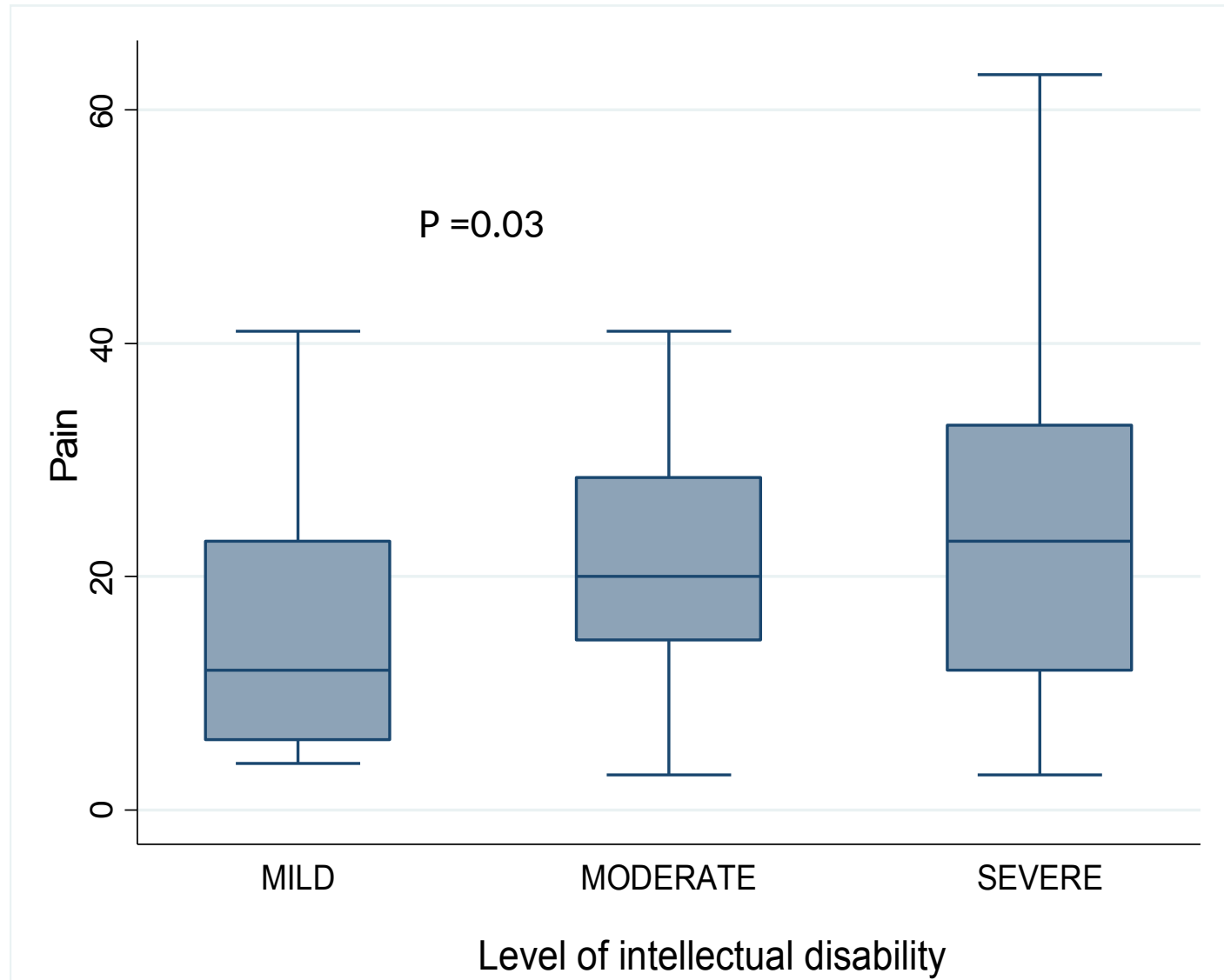
PAIN LEVELS IN **COGNITIVELY IMPAIRED** AND **HEALTHY KIDS**



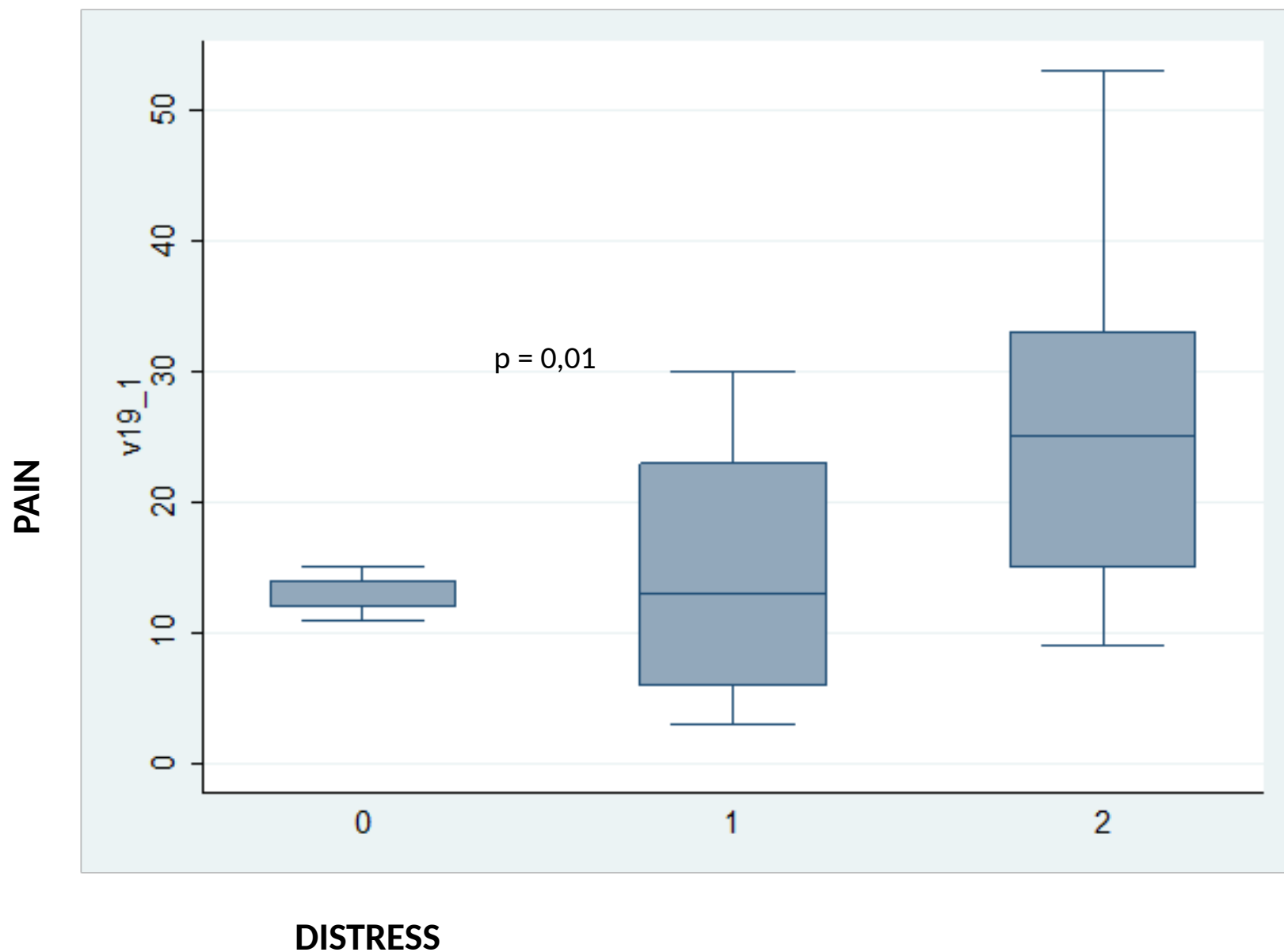
DISTRESS IN **COGNITIVELY IMPAIRED** AND **HEALTHY KIDS**

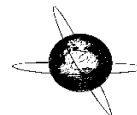


RELATION BETWEEN PAIN AND LEVEL OF IMPAIRMENT



RELATION BETWEEN PAIN AND DISTRESS IN IMPAIRED CHILDREN





Developmental changes in somatosensory processing in cerebral palsy and healthy individuals

Inmaculada Riquelme^a, Pedro Montoya^{b,*}

^a Department of Nursing and Physiotherapy, University of the Balearic Islands

^b University Institute of Health Sciences Research (IUNICS), University of the Balearic Islands

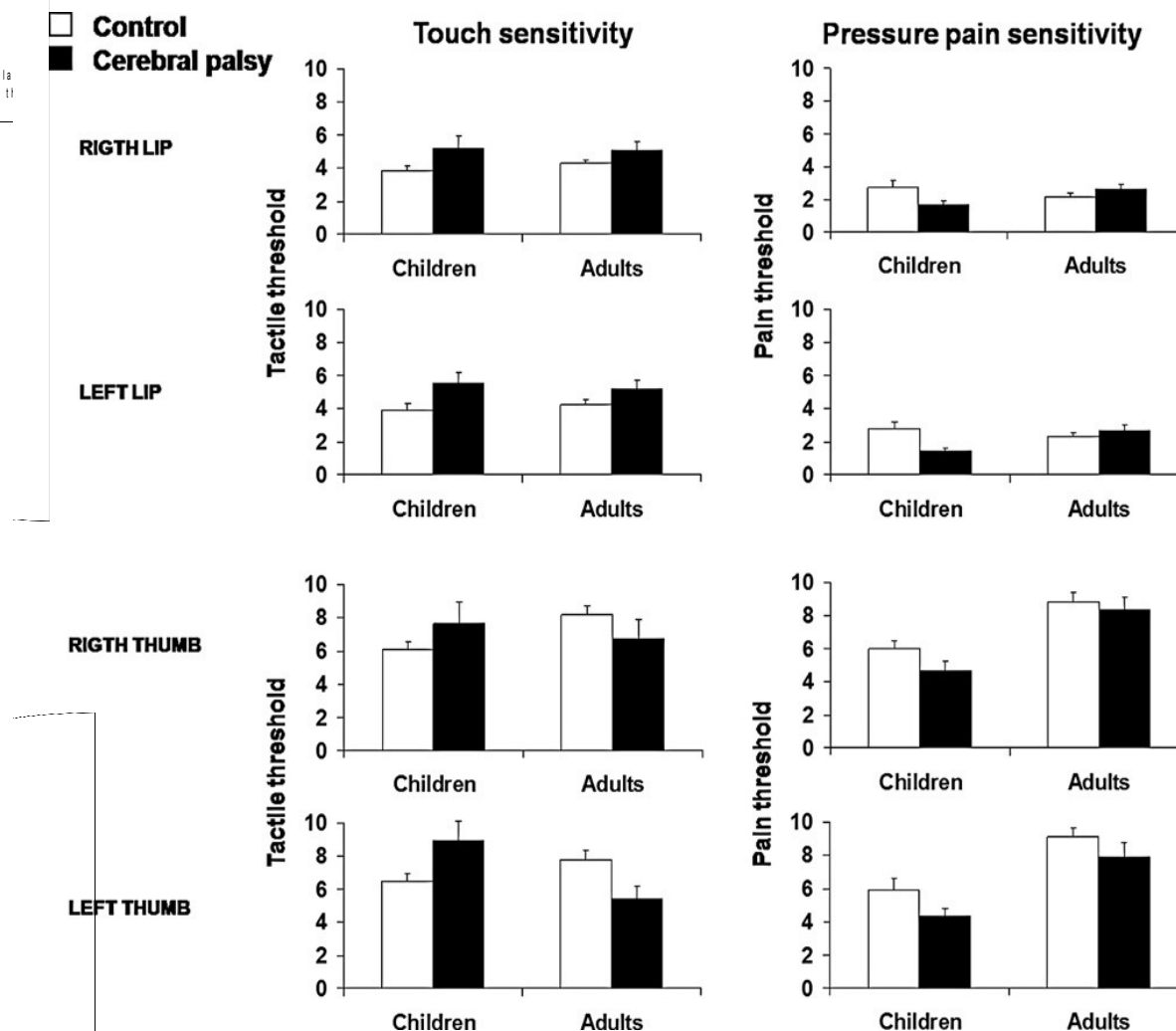


Fig. 1. Means of touch and tactile sensitivity scores in healthy and in cerebral palsy participants separated by age group.

The skin as a social organ

India Morrison · Line S. Löken · Håkan Olausson

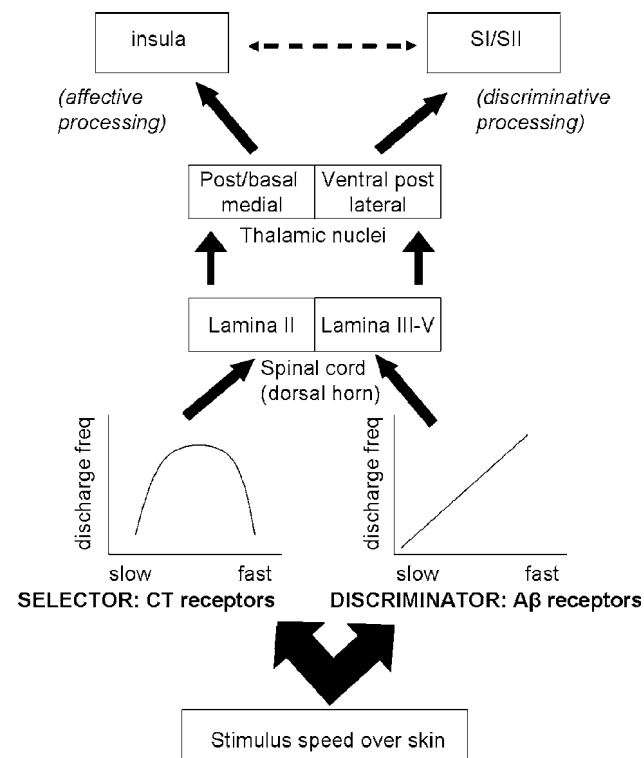
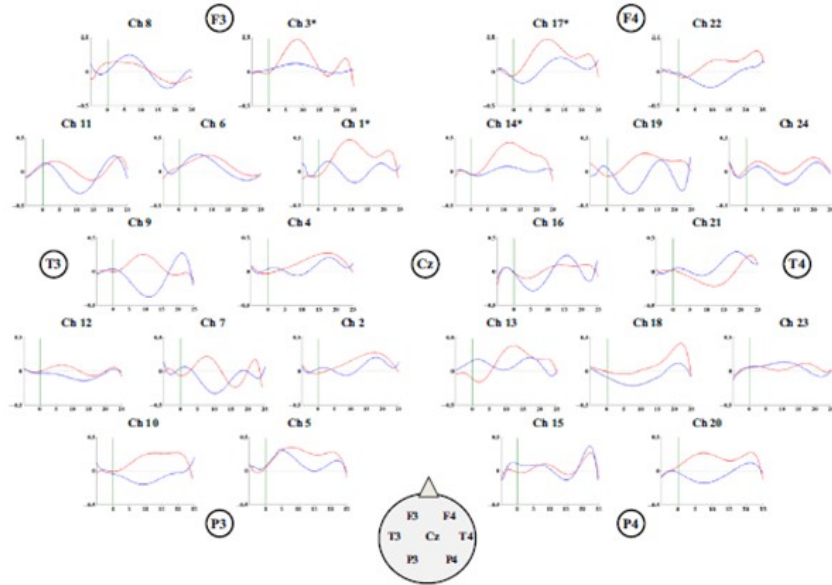
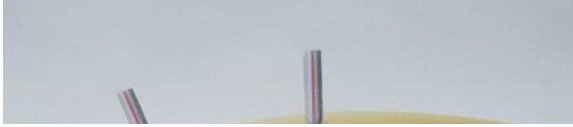


Fig. 2 Schematic model of affective and sensory-discriminative pathways for dynamic touch in hairy skin. CT afferents show an inverted U curve, while Aβ afferent discharge increases linearly with velocity. CT afferents may thus act as selectors of a limited range of velocities likely to carry social or hedonic significance, while Aβ activation is suited to discriminate different stroking speeds. These

Cerebral cortex activation in children with cognitive impairment during venipuncture

Bembich S. Peri F. et al .

OPTIC TOPOGRAPHY

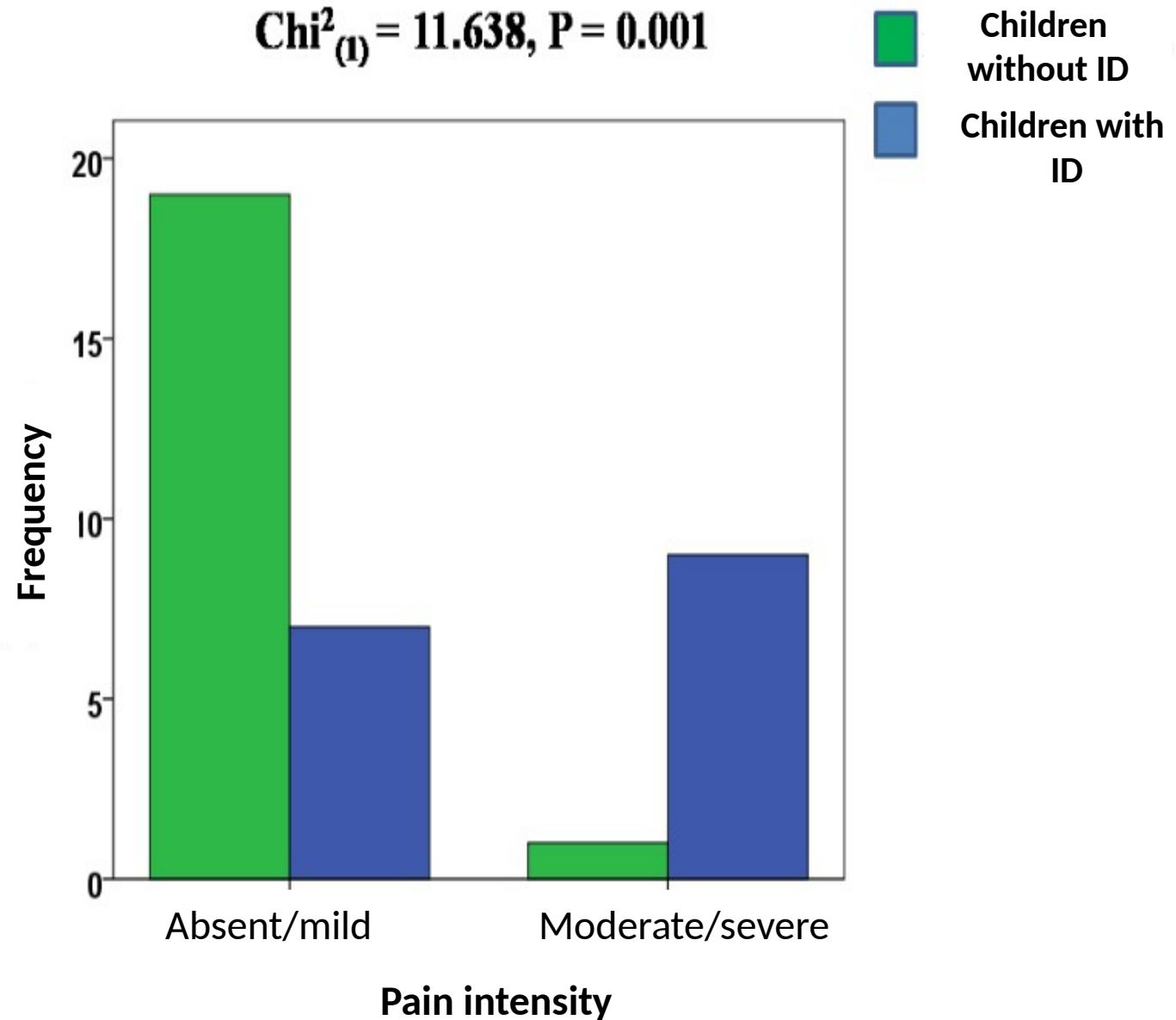


HbO2-> Cerebral blood flow

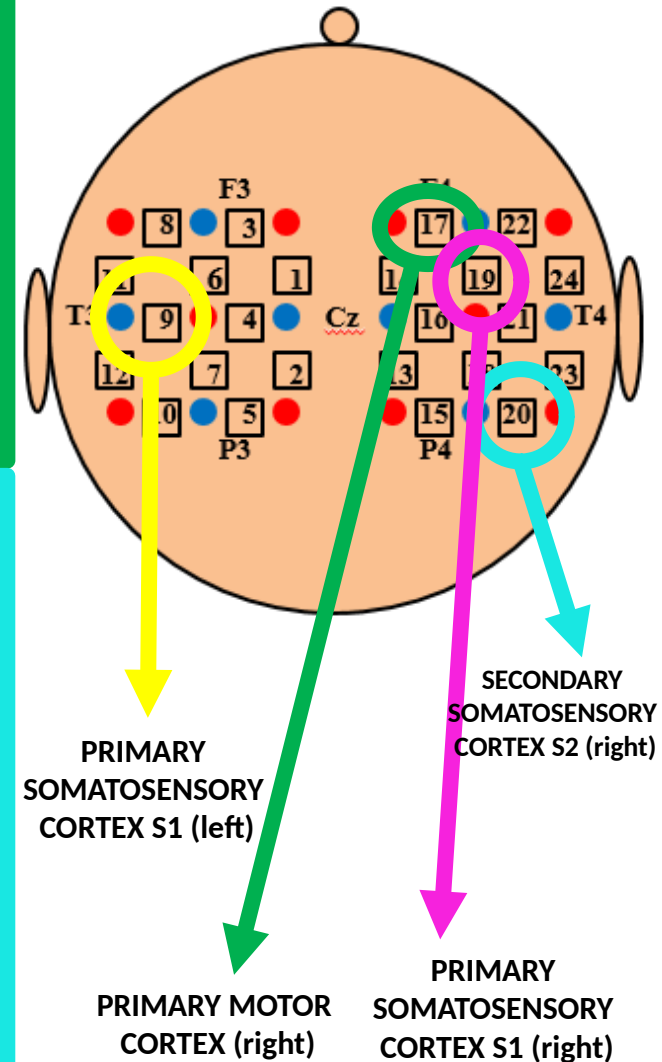
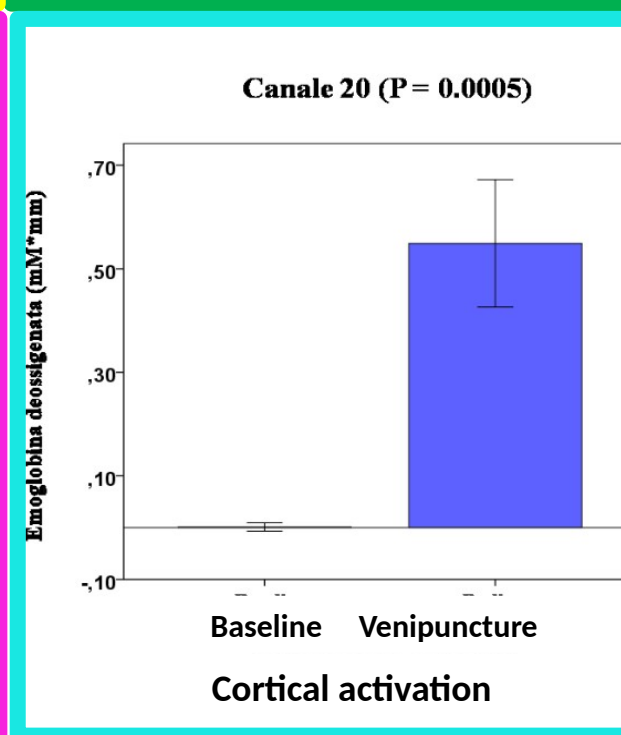
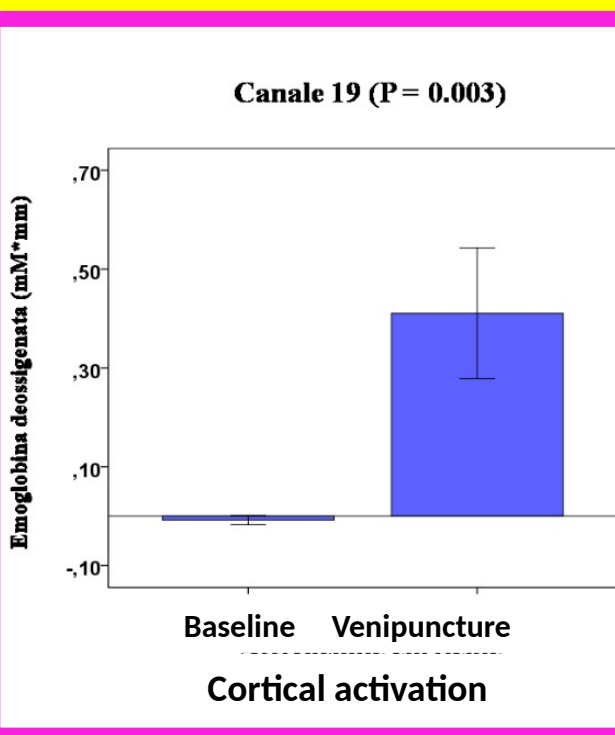
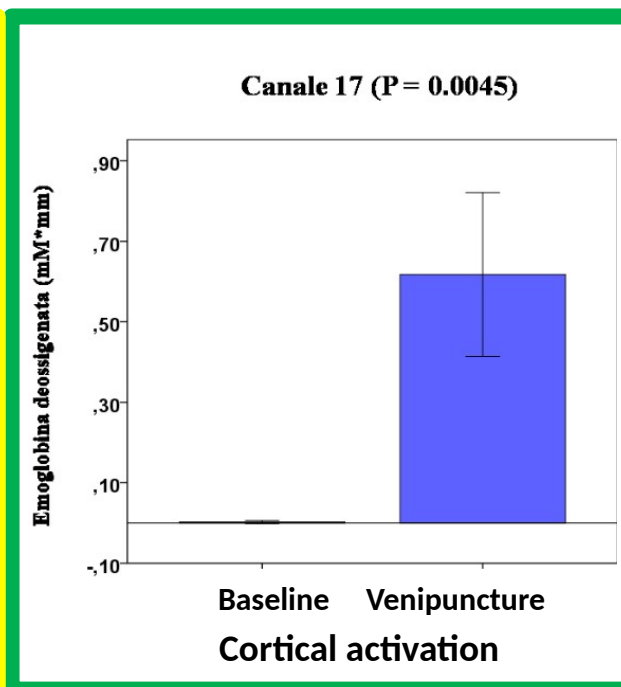
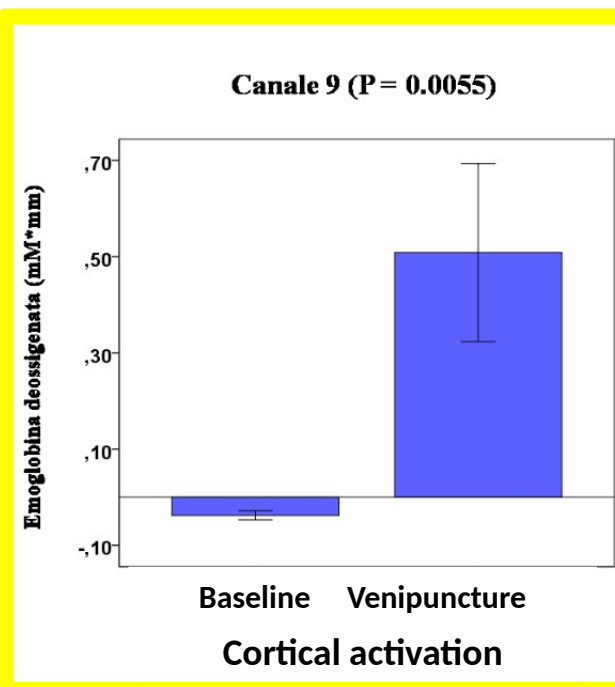
Hb-> Previous OXYGEN METABOLISM

Hb TOT-> Cerebral total blood volume

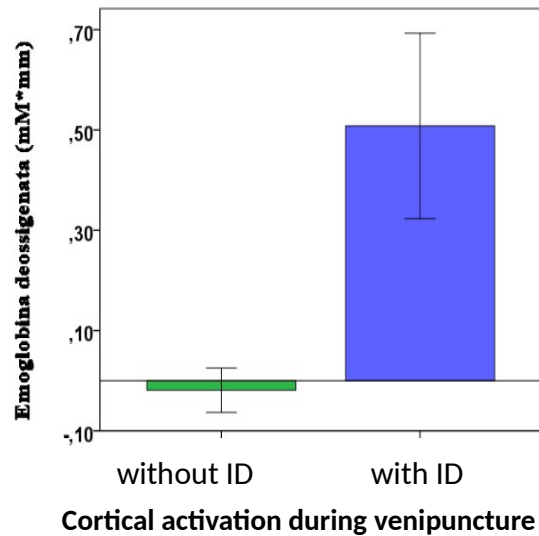
**CHILDREN
WITH
COGNITIVE
IMPAIRMENT
EXPERIENCED
MORE PAIN
THAN
HEALTHY
PEERS**



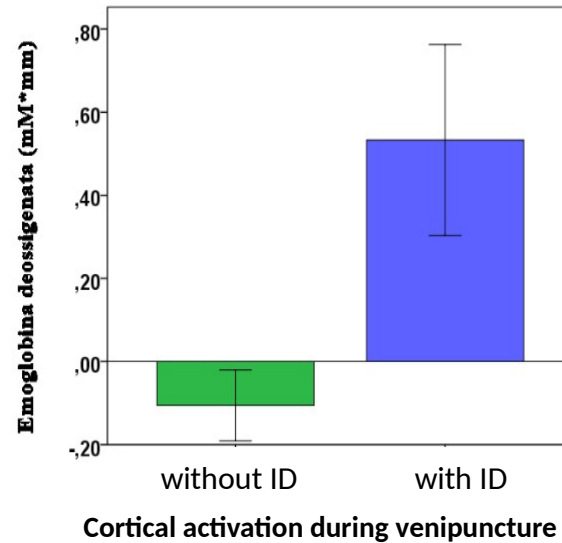
CHILDREN WITH COGNITIVE IMPAIRMENT DURING VENIPUNCTURE



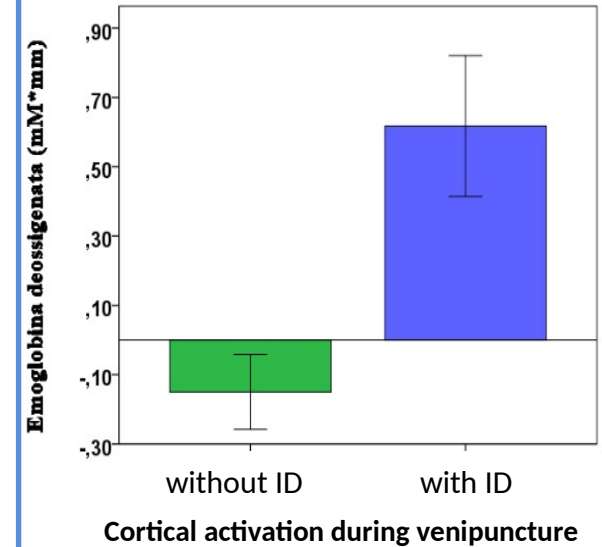
Canale 9 (P = 0.004)



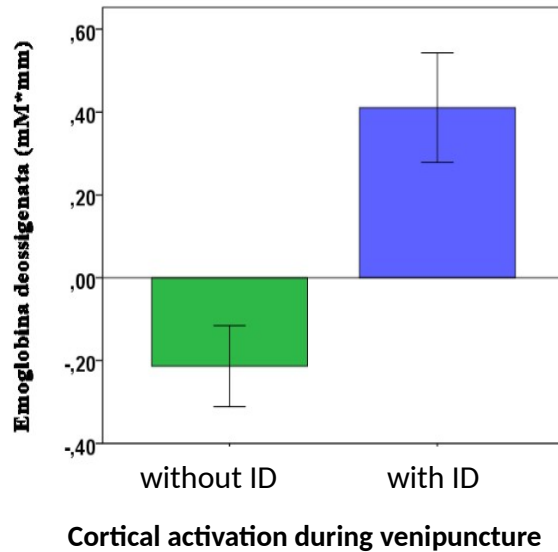
Canale 12 (P = 0.008)



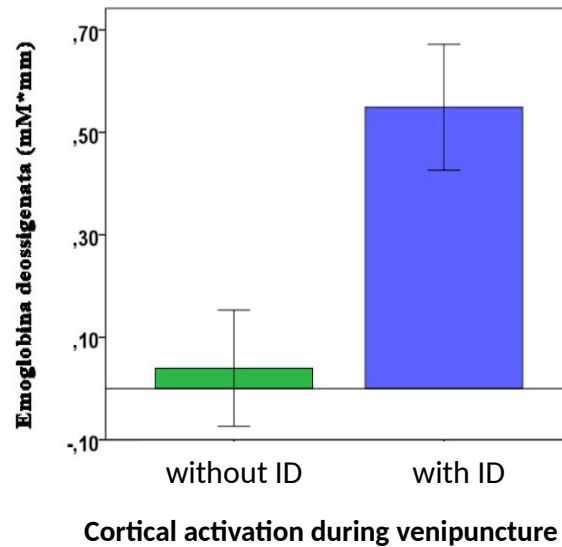
Canale 17 (P = 0.001)



Canale 19 (P < 0.001)



Canale 20 (P = 0.005)



**DEOXY-
HAEMOGLOBIN
INCREASE**

GLICOPIRROLATO

h. 6.30
h. 7.30 LANSOX 15
h. 8.00 200ml NUTRINI-3ml URSOBIL
h. 9.00 SABRIL-DINTOINA-NEURONTIN agg. RIVOTRIL 5gtt
h. 10.30 4gtt BRONCOVALEAS + 3ml fizio
h. 11.00 1/2 FIALA TOBRAMICINA + 2ml fizio AREOSOL
h. 12.00 150 NUTRINI-3ml URSOBIL
h. 13.00
h. 14.00
h. 15.00 GLICOPIRROLATO
h. 16.00 150ml NUTRINI
h. 17.00 4gtt BRONCOVALEAS + 3ml fizio
h. 17.30 1/2 FIALA TOBRAMICINA + 2ml fizio AREOSOL
h. 19.30 LANSOX
h. 20.00 200ml NUTRINI-3ml URSOBIL
h. 21.00 SABRIL-DINTOINA-NEURONTIN- RIVOTRIL-MELATONINA 5gtt
h. 22.00 0,50. ATEM + 3ml FISIO AREOSOL
h. 23.00 GLICOPIRROLATO
h. 24.00

La prospettiva della
Vita vera..

La tabella di un
giorno qualunque
senza complicazioni

....

.. più aspirazione delle
secrezioni ogni due ore...

Early Mortality and Primary Causes of

