Osteopathic Manipulation: Helping Patients from Childhood through Adulthood Part 1

Stacey England, DO
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Disclosures

1. With respect to my presentation, I do not have any financial arrangement or affiliations with any corporate organization(s) offering financial grants or support or development or sales of products to be discussed in this CME Program.
Objectives

- Understand the value of Osteopathic treatment in the pediatric population
- Increase interest in OMT for pediatric patients
- Understand and discuss key concepts when evaluating and treating pediatric patients with OMT
- Recognize the importance of identifying red flags and contraindications to OMT
- Identify common conditions amenable to OMT
- Be able to discuss balance ligamentous tension technique and the application to pediatric patients
- Introduce/review techniques that address the occipital condyles, sinuses, mandibular area/Eustachian tube, sympathetic chain, abdominal diaphragm, and pelvis.

Key points

- Osteopathic tenets
  - Biopsychosocial aspects
  - The child is not just a “small adult” - Anatomy and physiology
    - Developmental anatomy
    - Muscles, bones, joints
  - Wolf’s law
  - “As the twig is bent, so is the tree inclined” ~ William Sutherland, DO
  - Fryette’s principles do not apply to newborns and infants
- Good history and physical → appropriate assessment and plan
- Red flags and contraindications
- Choosing appropriate technique(s)
Key points: evaluation

- General inspection – static symmetry
- Palpation – tissue should feel healthy – look for health and help the body get the other area(s) back to health
- even subtle differences
- Chapman’s points – viscerosomatic reflexes
- Inherent motion of the tissues
- Active ROM → Passive ROM
- Neuro, vascular – strength, neuro-sensory, vascular, other/special tests
- What is the body trying to tell us from the history and PE?

Common disorders amenable to OMT
- AND MANY MORE -

- HEENT
  - Plagiocephaly
  - Poor suckling, feeding
  - Sinusitis
  - OM, Eustachian tube dysfunction
  - TMJ
- Gastrointestinal
  - GERD
  - *Colic
  - Constipation
  - IBS
- Respiratory
  - Asthma
  - Pneumonia
  - TTN
- Genitourinary
  - Dysmenorrhea
  - Dysfunctional voiding
- Neuro/psych
  - ADD/ADHD
  - Strabismus
  - Anxiety/depression
  - Headaches/migraines
- Musculoskeletal
  - torticallis
  - Scoliosis
  - Patellofemoral syndrome
  - Osgood Schlatter
  - IT band syndrome
**Be aware/Contraindications**

- Red flags – proper history and physical exam
- Unclear diagnosis – exs: craniosynostosis, Hirschsprung disease, cancer
- Joint laxity, instability, vulnerability (Exs: Down Syndrome – OA, Ehler’s Danlos, DHD - hips) – can still use OMT, but choose appropriate techniques
- Over enlarged friable organs
- Obstructive lung disease – asthma, CF; newborns and infants – avoid marked increase in inhalation volumes to avoid air trapping
- Do not compress the abdominal diaphragm of newborn/infants/small children
- Patient or parental refusal
- Uncooperative patient
- Others on case-by-case basis – clinical judgement
- Physician competence

**Key points: Osteopathic treatment**

- Goals = symmetric growth, homeostasis
- Keep well w/in physiologic barrier
  - Laxity of tissues, ossification
- Patience
- Do not force it
- **BLT** – Balanced ligamentous tension technique
  - Follow tissues being treated to balanced tension in all planes – do not force
  - Still point – where treatment occurs
- Occipital condylar treatment – CNs IX, X, XI, XII
- Do not overtreat – treat key areas
  - Even small changes can start the healing process
- Reassess
- Preventative care
Condylar decompression

Sinus effleurage – frontal and maxillary sinuses

- Patient supine or seated
- Doc at head of table (or in front of patient if seated)
- Warn about possible drainage down the back of throat
- Should not be pushing on TMJs, but should be aware if concern in this area
- Frontal sinuses: thumbs engage medial frontal sinuses – move thumbs laterally over skin/engaging sinuses then inferior toward zygomatic arches
- Maxillary sinuses: thumbs engage medial maxillary sinuses – move thumbs laterally over skin/engaging sinuses then inferior toward angle of mandible
Galbreath technique

* Can do seated as well
* Contraindicated or caution with TMJ d/o – evaluate if unsure
* Can stabilize as seen in picture or on opposite side of head – just beware not to compress or cause unwanted effects with stabilizing hand
  - Warn about possible drainage
  - Ask patient to relax mouth open
  - medial, inferior, slight anterior motion of mandible

Auricular drainage

* Can do seated as well
* Contraindicated or caution with TMJ d/o – evaluate if unsure
* Can stabilize as seen in picture or on opposite side of head – just beware not to compress or cause unwanted effects with stabilizing hand
  - Warn about possible drainage
  - Engage tissue to temporal bone and gently move clockwise until release felt, then counterclockwise until release felt
Ear pull technique

Rib raising – 2 handed seated or supine
- remember anatomy of pediatric rib angles
- must have good head control to perform seated

Stabilize at anterior axilla anteriorly, do not compress
Engage rib angles anterior and gentle lateral traction
Rib raising

- Cephalad thumb: gently engage area below xiphoid

- Caudal thumb: gently engages abdominal area below cephalad thumb and above umbilicus and provides traction inferiorly

Abdominal diaphragm technique
Abdominal diaphragm technique

Sacrum/innominate evaluation and treatment, BLT

Sacral contact demonstration – with cephalad hand
*note: this is opposite hand placement for adults

Inhalation/cranial flexion – external rotation of innominates, sacrum counternutates (extends).
Exhalation/cranial extension – internal rotation of innominates, sacrum nutates (flexes)
Don’t forget to have fun!

THANK YOU!
References


Recommended reading