SESSION K6

Acupuncture in Pediatrics

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Session Description:

The use of complementary and alternative medicine (CAM) has increased in popularity in recent years in both adult and pediatric population. This presentation will discuss the who, what, where and why in considering acupuncture in the pediatric population including both clinical experience and evidence based research, as well as, a summary of a recent inpatient pilot program using both acupuncture and acupressure at Seattle Children's Hospital.

Learning Objectives:

Following my presentation, participants will be able to:
1. Demonstrate an understanding of acupuncture from both an Eastern and Western medical perspective.
2. Assess the appropriateness of acupuncture in the pediatric population based on clinical indications and evidence-based research.
3. Discuss factors related to acupuncture including safety, effectiveness, treatment plans, treatment duration, referrals, and insurance coverage.
Acupuncture in Pediatrics
Who, what, when, where, and why?

The Acupuncture Service
Dr. Anne Lynn, MD
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Complementary and Integrative Medicine
• Acupuncture (Department of Anesthesiology & Pain Medicine)
  • Established at Seattle Children’s in 2004
  • Introduced to treat a broad range of health issues
  • Other CAM modalities include hypnosis, biofeedback, Reiki

The Acupuncture Team
Anne Lynn, MD
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Goals
• What is acupuncture?
  • Mechanism of effect, acupuncture theory, accessory treatment modalities, cautions and contraindications

• Clinical indications for acupuncture
  • Evidence-based indications, acupuncture in pediatrics, safety, common questions

• The Acupuncture Service at Seattle Children’s Hospital
  • Acupuncture at Seattle Children’s Hospital, inpatient pilot program results, contacting the acupuncture service with questions

What is acupuncture?

Acupuncture
• Definition
  • Stimulation of specific points on the body by the insertion of sterile, single-use, solid, thin needles

• Traditional Chinese Medicine (TCM)
  • Acupuncture, acupressure, Chinese herbal medicine, Eastern nutrition, moxibustion, guasha, cupping, tuina, etc.
Acupuncture Needles

How Tiny Is An Acupuncture Needle?

Mechanism of Effect
Eastern Medicine Understanding

Western Medicine Understanding

- Role of endogenous opioids
  - Reversal of acupuncture analgesia after administration of naloxone
    - Gate Theory of Pain
      - Inhibits pain transmission
      - Stimulates release of neurotransmitters
  - Polymodal receptors
    - Thermal stimuli
  - Brain activity
    - Functional MRI and positron emission tomography studies

Traditional Chinese Medicine (TCM) Modalities

Cautions and Contraindications

- Spontaneous bruising
- Clotting disorder, including use of anticoagulants
- Platelet counts < 20 K/mm3 w/o platelet transfusion
- ANC < 500/mm3
- Needling at site of local infection
- Acute or decompensating conditions
- Medical or surgical emergencies with instability of vital signs
- Electro-acupuncture contraindicated in patients with defibrillator
- Appropriate skin prep for immune compromised patients

Clinical Indications for acupuncture
Mechanism of Effect
Eastern Medicine Understanding
Acupuncture Research

- Surgical analgesia
- Post-operative nausea and vomiting
- Pain management
  - Lumbosacral pain, headache & cranial/face pain, perioperative pain, osteoarthritic pain, cervical pain & tennis elbow, musculoskeletal pain, pain associated with organic lesions
- Oncology
  - Nausea & vomiting, post-operative and cancer-related pain, leucopenia, post-chemotherapy fatigue, sensory neuropathy, anxiety, quality of life
- Gynecology
  - Dysmenorrhea, menstrual and hormonal irregularities
- Sequelae of cerebrovascular accidents, spinal cord injury, and head trauma
  - Paresis, dysphasia, neurogenic bowel and bladder
- Gastrointestinal
  - Abdominal pain, constipation, diarrhea
- Mood issues
  - Anxiety, depression, emergent delirium/lugilization
- Respiratory
  - Dyspnea, asthma, cough
- Pain medication weaning
- Substance abuse

Evidence-Based Indications in Pediatrics
Birth to adolescence

- Chronic pain
- Pediatric migraine
- Procedural stress
- Enuresis
- Constipation
- Epilepsy
- Allergies
- Neurologic disability
- Laryngospasm
- Post-operative vomiting
- Cancer-related conditions

Safety

- Safe therapy in the hands of experienced and qualified practitioners
  - Proper handling and clean needle technique
  - 202 reported cases of acupuncture-related adverse events in review of 35 years of literature (Lao et al. 2003)
- Acupuncture-related adverse events
  - Transient and mild
    - Bleeding, discomfort at needle site, fainting, sweating, fatigue
  - Rare incidence of serious adverse events
    - Pneumothoraces, cardiac tamponade, serious infections, injury to central nervous system

Common Questions

- Does it hurt?
- How long do the needles stay in?
- How many treatments do I need?
- How do I find an acupuncturist?
- How do I make a referral or “prescribe” acupuncture?
- How do I monitor progress?
- What about insurance?

Acupuncture and Insurance

- Most major insurance companies cover acupuncture

  Important Questions to Ask...
  - Does your insurance policy cover acupuncture?
  - Are there limitations on who you can see?
  - How many visits are covered per year?
  - Does your insurance company cover acupuncture for your conditions?
    - Acupuncture coverage may be limited to specific conditions. Some plans require a pain diagnosis in order for coverage to be effective.

  *Medicaid does not cover acupuncture*

The Affordable Care Act 2014

- All WA state plans are required to cover acupuncture
  - Insurance companies operating in the State of Washington
  - Insurance companies offering insurance in Washington as part of the health insurance exchange

- Additional Benefit from the Affordable Care Act
  - Washington state law allows unlimited acupuncture treatments for chemical dependency issues
Acupuncture Research

- Surgical analgesia
- Post-operative nausea and vomiting
- Pain management
  - lumbosacral pain, headache & craniofacial pain, perioperative pain, osteoarthritic pain, cervical pain & tennis elbow, musculoskeletal pain, pain associated with organic lesions
- Oncology
  - nausea & vomiting, post-operative and cancer-related pain, leucopenia, post-chemotherapy fatigue, xerostomia, insomnia, anxiety, quality of life
- Gynecology
  - dysmenorrhea, menstrual and hormonal irregularities
- Sequelae of cerebrovascular accidents, spinal cord injury, and head trauma
  - paresis, dysphasia, neurogenic bowel and bladder
- Gastrointestinal
  - abdominal pain, constipation, diarrhea
- Mood issues
  - anxiety, depression, emergence delirium/agitation
- Respiratory
  - dyspnea, asthma, cough
- Pain medication weaning
- Substance abuse
The Acupuncture Service at Seattle Children’s Hospital

The Acupuncture Service

- Inpatient and Outpatient Acupuncture
  - Order placed by treating physician or primary team
  - Reason for referral indicated
  - Adherence to hospital’s clinical policy and procedure guidelines

The Acupuncture Service

- Outpatient Pain Clinic
  - Tuesdays & Thursdays

- Inpatient Service
  - Monday-Friday, 8am-5pm
  - Full day inpatient coverage

Inpatient Pilot Program

January-June 2014

- Consistent access to acupuncture therapy
- Quick turnaround for new consults
- Multiple treatments per week
- Assess interest, acceptability, feasibility

Department Presentations

- Pain Fellows
- Rheumatology Department
- Gastroenterology and Hepatology Department
- Palliative Care/PACT
- Resident Conference
- Odessa Brown
- RN Staff Meeting
- Rehabilitation Medicine Department
- Pediatric Residents Lecture
- Upcoming…Grand Rounds
What are we treating?

- Pain
  - Post-operative, cancer-related, cancer treatment-related, other
- Nausea and vomiting
  - Post-operative, chemotherapy-induced, other
- Fatigue
- Sleep disturbance
- Mood issues
- Neurologic dysfunction
- General support
- GI complaints
- Pain medication dependence/weaning
- Seizure disorder
- Complex Regional Pain Syndrome (CRPS)

Patient/Family Responses

- "I think that offering this service inpatient is a great option especially for first timers. It is sometimes hard to add "one more thing" to the already busy appointment schedule, but inpatient allows for more treatments so we can see the cumulative treatment results. Thanks."
- "I think acupuncture is a wonderful addition to other therapies"
- "This has been an amazing extra help in my daughter’s care. Fourteen years at Children’s, this program is really the extra step we have come to love about Seattle Children’s Hospital"

Provider Responses

- "I feel like it is an important service, particularly for our families who have a strong interest in integrative medicine. I found that by offering acupuncture services, families are more interested in the whole of what my department has to offer."
- "Helped with pain management and calming the patient’s anxiety."
- "It helped my patient with ulcerative colitis while inpatient and having a lot of acute and chronic pain."
- "I usually offer acupuncture for patients who are at high risk to develop PONV and who have had problems with this in the past in spite of "maximal" treatment with traditional anti-nausea meds. Without exception all patients/parents were interested in this and all of them had significant improvement compared with their previous experience."
- "It is very helpful for inpatient kiddos and also allows a relationship to be formed prior to discharge."

Acupuncture Resources

- National Center for Complementary and Alternative Medicine (NCCAM)
- National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM)
  - www.nccaom.org
- American Academy of Medical Acupuncture (AAMA)
  - www.medicalacupuncture.org
- Seattle Children’s Artwork: Amy Ruppel and Lab Partners (Ryan Meis and Sarah Labieniec)
Questions?
acupuncture@seattlechildrens.org