Children with Chronic Pain: Sex and Gender Differences

Prevalence

- Chronic pain is a major problem for many children and adolescents, causing significant suffering, disability, anxiety and emotional distress.
- Chronic pain may develop from injury, disease, psychological factors, or from an unknown etiology.
- The prevalence of childhood chronic pain increases generally with age, but certain pain conditions affect girls more than boys. For example, clinical referrals indicate that Complex Regional Pain Syndrome - Type 1 has a female to male ratio of ~ 9:1, affecting children primarily in their pre- and early teen years.

Etiologic and Risk Factors

- Chronic pain generally has multiple causes, often with both nociceptive and neuropathic components, rather than a single cause. Psychosocial factors (cognitive, behavioral, and emotional) typically contribute to a child’s pain experience, emotional distress, and physical disability.
- Psychosocial factors may be different for girls and boys. For example, females show more internalizing behaviors with symptoms of depression and anxiety, while males show more externalizing and disruptive behaviors.
- Females may be at higher risk for continuing pain and report greater use of health care, medication, and non-drug methods of pain control.
- Much research is now focusing on determining the risk factors for developing chronic pain, especially why girls and pre- and early teens may be most vulnerable.
- While sex and gender-related differences have been noted in children's chronic pain behaviors and pain sensitivity (comparable to those for adults), we lack sufficient data to understand the interplay of biological, cultural and developmental factors in mediating such differences.

Pain Management

- Like adults, children with chronic pain usually require a multimodal therapeutic regimen comprised of drug, physical, and psychological therapies – to address the primary etiology and any environmental, family, and psychological factors that affecting children's pain and disability.
- However, we lack data from well-designed cohort studies and RCTs to support the overall efficacy of many interventions (both drug and non-drug therapies), as well as their sex- and age-based efficacy.

References: