

You asked about...

Answers to your questions from medical experts

This month:

1. What can I do about limb pain in children?
2. What is the correlation between computers and eyestrain?

1. What can I do about limb pain in children?

By Dr. Jean Jacques Turcotte, a pediatrician in St. Hyacinthe, Quebec.

Limb pain is a common complaint in primary care pediatrics. The challenge is to make an appropriate diagnosis in a timely fashion without exposing the child to unnecessary diagnostic studies.

What are some of the causes?

Trauma and sport-related injuries account for more than 50% of all limb pain in children.¹ Fractures are more common than sprains and ligamentous strains in very young children.² Overuse syndromes are caused by microtrauma, e.g., stress fracture, Osgood-Schlatter disease, shin splints, and chondromalacia patellae. Growing pains is another cause.

Growing pains occur in approximately 10% of school-aged children.¹ The pains are characteristically intermittent and bilateral.^{3,4} The most common sites are the shins and calves. The pains can last from a few minutes to a few hours, but usually disappear completely by the morning.³ There are no abnormal physical signs, but frequently there is an emotional component to the pains.

Legg-Calvé-Perthes disease, or avascular necrosis of the femoral head, occurs primarily in children under 10, with a male to female ratio of 5:1.

Toxic synovitis is most likely a viral synovitis or post-viral reactive arthritis.⁴ It is the most common cause of limp with hip pain in childhood.

Osteomyelitis is most common in children three to 12, and is most often caused by *Staphylococcus aureus*. Osteomyelitis usually involves a single bone and is associated with tenderness, redness, warmth, and swelling over the lesion, as well as systemic signs, such as fever and toxicity. The organisms causing septic arthritis are basically the same as those causing osteomyelitis. Septic arthritis is the most common cause of severe monoarticular pain.⁴ The affected joint is often erythematous, swollen, and tender.

What are the investigations?

Laboratory tests are unnecessary in the majority of children with limb pain. They should be ordered when indicated by the history or physical examination. A plain X-ray examination may be necessary if a bony abnormality, such as a fracture, is suspected.³ A bone scan is most helpful when a stress fracture or osteomyelitis is suspected.

What is the management?

Treatment should be directed to the underlying cause. Most limb pain is benign, requires no intervention, and is self-limited. If the child complains of moderate to severe pain, analgesics, such as acetaminophen, nonsteroidal anti-inflammatory drugs, or codeine, should be considered.

Answered by: Alexander K.C. Leung, MD, FRCPC, FRCP (U.K. and Ire), FRCPCH, clinical associate professor, University of Calgary, Calgary, Alberta

You asked about...

2. What is the correlation between computers and eye

By Dr. Eric Rumack, an occupational health physician in Toronto, Ontario.

A common cause of eyestrain, and other eye or head and neck problems among computer operators, is that both the ocular and neck muscles are held in one position for extended periods of time. Experts in the field of ergonomics recommend a 20-20-20 rule. This involves a 20-second break every 20 minutes, focussing on an object at least 20 feet away from the desk.

What if my work requires long-term computer use on a regular basis?

When staring intently at a computer screen, we don't tend to blink as often as we normally do. Sometimes this can result in dry, irritated eyes.

A computer user should make a conscious effort to blink whenever possible, or use lubricating drops.

Does the position of my computer screen have an effect on eyestrain?

Computer desks and monitors should be placed so that glare on the screen is minimal. Monitors should be placed so that the first line of text is level with the viewer's eyes. If the viewer notices the computer screen is flickering, he/she should reset the "refresh rate" to a higher setting.

I wear glasses. Are there any extra precautions I should take concerning computer use?

Eyeglass wearers should have their prescriptions checked annually. Bifocal wearers may benefit from glasses made specifically for working at the computer. [CME](#)

Answered by: Barrie McCombs, MD, CCFP, CCFP(EM), FCFP, director, medical information service, University of Calgary, Calgary, Alberta.



Helping Keep Your Patients Covered.

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References from Question 1

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