



## Functional back pain

Back pain in children and adolescents can have very different origins. However, most problems are harmless, so called «functional or muscular back pain». This means that the pain arises from muscular overload and not from a disease of the bones (vertebrae), the intervertebral discs or any inner organ situated close to the spine (e.g. kidneys, big blood vessels)

### ***What do patients with muscle pain feel ?***

- Pain occurs during or after physical activity, or with sitting or standing over a long time
- The pain is dull and involves a large area.
- It is rarely acute or very strong
- Frequently the region beneath the lumbar spine is affected
- Radiating pain, pain at rest, night pain or fever are lacking

### ***How can muscular overload develop?***

- It is typically seen during the pubertal growth spurt between the age of 10 and 15 years
- During that time the trunk grows many centimetres per year. Muscular growth is slower which results in a relative muscular insufficiency which means that the muscles are too short in relation to the long trunk
- High levels of sporting activity and/or insufficiency of the back and abdominal muscles usually contribute to the occurrence of overload and pain

### ***What can be done against it ?***

- Reduce or modify physical activities
- Heat application (e.g. take a warm bath, fango packs)
- Massages
- Slow stretching exercises
- Fascia training (Black Roll)
- Anti-inflammatory drugs are only indicated in rare cases of very strong pain, usually only for a few days.
- App-based exercises (e.g. “Rumpfzirkel”)

### ***How can one prevent muscular back pain due to overload***

- By far the best means is lifelong, regular training for trunk («Core») stability. Better every day 10-15min (“back hygiene”) than irregular and intensive training
- Stretching, fascia training
- Yoga, Pilates



***When do I have to see a doctor again***

- In case of night pain (waking up because of pain), radiating pain to the legs, fever
- No improvement despite adequate therapy over 4-6 weeks

***Which exercises can I easily build in my daily life ?***

- Relaxation, Stretching
- Fascia training
- Strengthening



Whole body-Stretching for improvement of the overall flexibility



Training with the black roll (fascia training) for more flexibility and/or against muscle spasms



„Core Stability“ exercise



Modify by changing the basic position e.g. extended legs or increase time (30s instead of 20s) or as shown with additional trunc rotation



Sensomotoric training to improve der inter- und intramuscular coordination.