CLINICAL SNAPSHOT

Paraspinal Compartment Syndrome—an Insidious Cause of Acute Back Pain

A 23-year-old male refugee presented to the emergency department with lumbar back pain after heavy manual labor the day before. Clinical examination revealed hypertrophy and induration of the left erector muscle of the spine. The lumbar spine area was extremely painful (VAS 9). Flexion and extension were limited. Laboratory tests demonstrated a creatine kinase concentration of 44 995 U/L. Magnetic resonance imaging showed signal elevation in the left erector muscle of the spine. Emergency surgical decompression (compartment splitting) was carried out, revealing macroscopically and histologically apparent areas of necrotic muscle fibers and regions of ischemic, non-contractile muscle. The operation wound was temporarily closed using a vacuum treatment system (VAC). Only 21 cases of paraspinal compartment syndrome are known worldwide. Microbiological analysis found no *Mycobacterium tuberculosis* or other bacteria.

A second-look intervention revealed no further necroses, so the wound was closed. At 1-year follow-up the patient had normal local findings and no pain. His creatine kinase concentration was 131 U/L. Sickle cell anemia, a rare cause of paraspinal compartment syndrome, was ruled out.

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Conflict of interest statement: The authors declare that no conflict of interest exists.

Translated from the original German by David Roseveare.

Cite this as: Zyskowski M, Schwarz A, Huber-Wagner S: Paraspinal compartment syndrome—an insidious cause of acute back pain. Dtsch Arztebl Int 2019; 116: 118. DOI: 10.3238/arztebl.2019.0118a