Meniscus lesions following extended periods of work in a kneeling or squatting position

Definition

Tear of the lateral or medial meniscus of the knee.

Diagnostic criteria

Pain at the medial or lateral aspect of the knee joint, swelling, locking. Positive provocation test for meniscus injury, e.g. Mc Murray’s test. Radiography rules out other causes. MRI scan and ultrasound may show meniscus injury. Arthroscopy confirms the diagnosis.

Other causes, e.g. sports injuries, should be ruled out.

Exposure criteria:

Minimum intensity of exposure

Prolonged kneeling or squatting confirmed by exposure history. The exact dose-response relationship is not known. The evidence is based on studies from the forties and the fifties of miners.

Minimum duration of exposure: Weeks

Maximum latent period: Days

Induction period: Weeks

Definition of causal agent

Maintaining a working posture involving kneeling or squatting probably in combination with a crouching position and/or heavy lifting. Repeated minor injuries as slipping because of wet or uneven support may play a role.

Main occupational uses and sources of exposure:

Prolonged kneeling or squatting, e.g. miners, floor layers, carpenters, electricians.