

Pelvic girdle pain (symptomatic pelvic girdle relaxation, pelvic joint syndrome)

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Recommendations

- *The diagnosis is made on the basis of a detailed medical history, pain localisation and positive clinical tests.
- *Risk factors are previous back pain, heavy work, high body mass index and parity.
- *Prognostic factors for persistent postpartum pain are the degree of severity of pelvic girdle pain during pregnancy and symptoms of anxiety and depression.
- *The women may benefit from reassuring knowledge-based information.
- *Pain may be reduced and function improved through body awareness and specific functional training.
- *If required, the patient may be referred to individualised physiotherapy, targeted at the patient's specific problems and evaluated on a continuous basis.

Search strategy (brief)

Systematic searches have been done in Medline, Embase and Cinahl, among other databases, using different combinations of search words such as: low back pain, pelvic girdle pain, pelvis, pregnancy, postpartum, physical therapy, exercise and rehabilitation.

The recommendations are based on the European guidelines, randomised controlled studies and clinical experience. There is no good systematic review of recent date or any national guidelines for pelvic girdle pain.

Definition

Pain from the pelvis (the sacroiliac joints and/or the symphysis pubis) which occurs during pregnancy or immediately after birth, and where no other cause of the pain is ascertainable (pelvic girdle relaxation, ICD-10 diagnostic code 026.7. subluxation of symphysis (pubis) in pregnancy, childbirth and the puerperium).

Pelvic girdle relaxation is a normal physiological process during pregnancy, which should not result in functionally impairing discomfort. It is, however, regarded as a pathological condition when women experience it as a painful problem and consult their physician with certain symptoms and signs¹¹. In 1990, the term symptomatic pelvic girdle relaxation was proposed for pelvic problems during pregnancy, while postpartum discomfort was termed pelvic joint syndrome. The term pelvic girdle relaxation gives an impression of laxity and may create an unfortunate image for patients. Under the European guidelines, the term pelvic girdle pain is used as the international term. It is therefore proposed that pelvic girdle pain should be used for problems relating to the musculoskeletal system, thus excluding pain and discomfort from other organ systems.

Incidence and prognosis

Approximately half of all pregnant women experience back pain and/or pelvic girdle pain. There is internationally strong evidence of an incidence of pelvic girdle pain of 20 % during pregnancy¹⁶. Most women become symptom-free in the course of 2-3 months after having given birth. Less than 10 % report long-term postpartum problems, and approximately 3%

state that they experience severe problems⁴. Women with pelvic girdle pain often function less well than women with back pain during pregnancy⁹.

Ethiology/pathogenesis

- There is insufficient knowledge about the causes of pelvic girdle pain.
- Possible causal factors are hormonal, biomechanical with increased or asymmetrical mobility of the sacroiliac joints, poor muscle activation and stress of ligament structures.

The pregnancy hormone relaxin seems to be the principal causal factor for the physiological loosening of the ligaments around the pelvic joints, but studies have not shown any unambiguous relationship between relaxin level and pelvic girdle pain¹. It is clinically known that some women may experience an onset of pelvic girdle pain already in the 4th to 6th week of pregnancy before the occurrence of changed biomechanical conditions such as increased weight and changed weight bearing. Ligament structures around the sacroiliac joints are a possible source of pelvic girdle pain and have been found to provoke pain in women with postpartum pelvic girdle pain⁷. Greater mobility in the pelvic joints during pregnancy and after birth have been found in patients with pelvic girdle pain than in healthy control group subjects, but, due to large normal mobility variations, mobility cannot be used as a diagnostic criterion in single patients. However, a correlation has been found between asymmetric mobility of sacroiliac joints and pelvic girdle pain. Poor muscle activation may also be a probable mechanism for persistent pain and dysfunctions in patients with pelvic girdle pain¹¹.

Diagnosing

- The diagnosis is made on the basis of a detailed medical history, pain localisation and positive clinical tests. The best tests for identifying pelvic girdle pain are posterior pelvic pain provocation test (P4) and active straight leg raise (ASLR) test.
- Difficulties walking, standing and sitting over an extended period of time are characteristic features.
- The pains are typically located under the spina iliaca posterior superior, in the gluteal region, the dorsal aspect of the thigh and/or at the symphysis pubis.
- Imaging diagnostics are not recommended.

Differential diagnostics

- Acute muscular strain with low back pain (lumbago)
- Pressure on nerve roots (sciatica)
- Rheumatological disease
- Pelvic venous thrombosis

Risk factors

Known risk factors for pelvic girdle pain during pregnancy are previous back pain, heavy work, high body mass index and parity. Prognostic factors for persistent postpartum pain are the degree of severity of pelvic girdle pain during pregnancy and symptoms of anxiety and depression^{3;4;16}.

Follow-up/treatment

- The objective is to reduce pain, improve the women's functional capacity and prevent that the condition becomes of long-term duration.

There is a wide range of treatment types available for alleviation of pelvic girdle pain, but most of them are without good documented effect. The European guidelines for pelvic girdle pain recommend that knowledge-based and reassuring information and individualised

exercises are provided ¹⁶. Studies show that different subgroups of pelvic girdle pain may require different treatment approaches. The treatment should be individualised, targeted at the patient's specific problems and assessed on a continuous basis. Positive experiences gained during training may contribute to permanent changes and reduce the fear of pain and physical activity. Pain may be reduced and function improved through body awareness and specific functional training. General training often has little effect on pelvic girdle pain, but physical activity that does not increase the pain is recommended ¹⁰. It is recommended not to continue with treatment that makes the pain worse or that does not have a positive effect.

Exercise and training

Physical activity that does not provoke pain is recommended. Individual exercises under the guidance of a physiotherapist are recommended and are better than general training and group training. Various studies that use different interventions show varying results ⁸, but a Norwegian study has shown good and sustained effect of individualised physiotherapy with focus on body awareness and specific functional training ^{12;15} (1b). Fitness training of the pelvic floor is not recommended for pelvic girdle pain (but for incontinence) ^{13;14} (III).

Pelvic support belt, crutches and spikes

The use of a pelvic support belt may be tried ⁶, but with the provision of individual guidance (1b). Crutches may be used for women with intense pains and movement difficulties (4-point gait is recommended). Spikes are recommended in the winter (V).

Relaxation, massage

Good rest for short periods in good resting positions may be beneficial ². Massage may provide pain relief, but is not recommended as a single measure. Good rest should be combined with individualised physical activity (V).

Manipulation and mobilisation of joints

Based on findings from clinical examination, specific mobilisation of the sacroiliac joints is suggested in connection with increased stiffness/reduced mobility in the sacroiliac area (V). Mobilisation of joints can be performed by physiotherapists, manual physical therapists and chiropractors. There is no documentation for the efficacy of manipulation ¹⁶.

Acupuncture/TENS

May be tried for pain relief during pregnancy ¹⁶ (1b).

Analgesics

Analgesics such as paracetamol may be tried for women who have intense pain at night and sleep badly (V). In connection with postpartum pain of an inflammatory nature, relief and nonsteroidal anti-inflammatory drugs (NSAIDs) are suggested ¹⁶.

Sick leave

Graded sick leave and adjusted work tasks as required (V).

If the condition entails difficulties walking, expenses for physiotherapy are reimbursed.

Surgical immobilisation of the pelvic joints

Is only proposed in very special cases with severe dysfunction and where adequate conservative treatment does not provide any effect ¹⁶ (IV). Special competence is available at the Department of Orthopaedic Surgery at Oslo University Hospital.

Complications

In addition to the woman being in pain, her working capacity is affected as well as the relations with her family and other surroundings. Cooperation with the patient's regular GP and perhaps the Specialist Health Services may be necessary. In some cases, the condition may be of a long-term nature and cooperation with the Norwegian Labour and Welfare Administration (NAV) may be important.

Birth/caesarean section

It may be an advantage to plan the birth together with the department in which the woman plans to give birth. A review of different childbirth positions, tub/birth pool and analgesics may be relevant. Women with pelvic girdle pain should give birth vaginally, preferably in individualised childbirth positions (for example in a lateral position or sitting in a beanbag). Some physiotherapists provide guidance in childbirth positions and movements that will facilitate the labour process. A caesarean section is not recommended in connection with intense pelvic girdle pain, as there is no documentation that a caesarean section prevents postpartum pelvic girdle pain. Instead, such intervention has been found to entail an increased risk⁵. Epidural or spinal anaesthesia is not associated with postpartum pelvic girdle pain.

New pregnancy

There may be a risk of pelvic girdle pain in connection with a new pregnancy, but the symptoms are often handled better, and there is no evidence that the pain persists after more births.

Physiotherapy

Free physiotherapy in connection with:

- symptomatic pelvic girdle relaxation with difficulties walking, during the pregnancy and for up to six months from commencement of postpartum treatment.
- chronic pelvic joint syndrome when the diagnosis has been made by a specialist in physical medicine and rehabilitation, orthopaedics or rheumatology.

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PATIENT INFORMATION

An information brochure is available from:

Landsforeningen for kvinner med bekkenløsningsplager (LKB)
 The Norwegian Association for Women with Pelvic Girdle Pain (LKB)
 Postboks 9217 Grønland
 0134 Oslo, Norway
 Tel. +47 24 10 24 00
 www.lkb.no

Illustration of P4 test and ASLR test (Stuge 2010, Tidsskrift for Den norske Legeforening – the Journal of the Norwegian Medical Association)

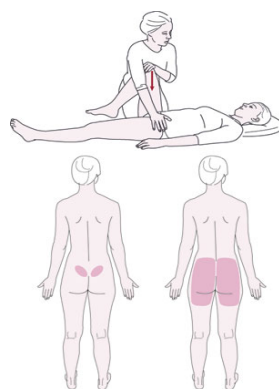


Figure 1 Posterior pelvic pain provocation (P4) test

The patient lies on her back with one leg stretched straight out and the other bent 90 degrees in the hip and maximally in the knee on the side that is being examined. The examiner applies light pressure in the longitudinal direction of the femur, while the spina iliaca anterior superior of the other side is stabilised gently with the examiner's other hand. The test is positive if a familiar pain located above the sacroiliac joint area is provoked.



Figure 2 Active straight leg raise (ASLR) test

The patient lies on her back with straight legs approximately 20 cm apart. The patient raises one straight leg approximately 20 cm up from the floor without bending the knee. The test is repeated with the other leg. The patient gives a score on how heavy or difficult it feels to lift her legs (for each leg) on a scale from 0-5: not difficult at all = 0; slightly difficult = 1; moderately difficult = 2; very difficult = 3; nearly impossible to raise the leg = 4; impossible to raise the leg = 5. The scores for both legs are added up to achieve a score from 0 to 10.