ORTHOPAEDIC ONCOLOGY · PATIENT GUIDE

Pelvic Bone Tumours: How Location Affects Surgery and Reconstruction

Where the tumour sits, what needs to be removed and what reconstruction is meant to achieve.

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Pelvic bone tumour surgery involves a region close to major nerves and blood vessels. The location and extent of removal affect whether the remaining pelvis needs reconstruction. There is more than one way to address the resulting defect.[2]

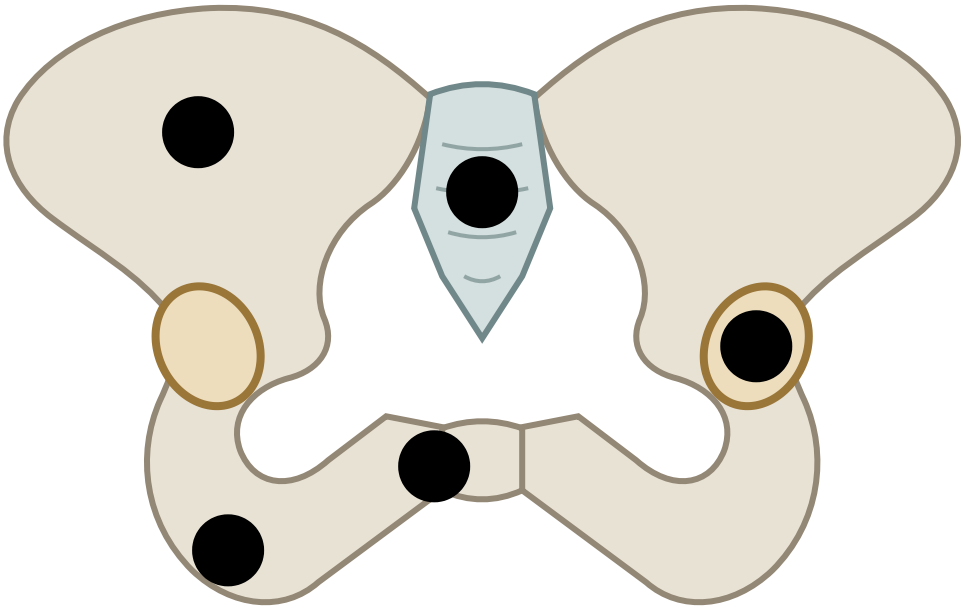
The first question is what the operation needs to remove. The next is what support and movement the remaining pelvis can provide. This article concerns that reconstruction decision when tumour removal is being considered; it cannot supply one operation or recovery plan for every pelvic lesion.

Where is the tumour in relation to the hip?

The hip is a ball-and-socket joint. Its socket, the **acetabulum**, is part of the pelvis; the ball is the head of the thigh bone. Cartilage covers these surfaces, while the capsule and ligaments help keep the joint stable.[4]

Finding the main pelvic landmarks

Simplified view from the front.



1. 1**Ilium**The broad upper part of each hip bone.
2. 2**Sacrum**The central bone at the base of the spine, joined to both hip bones.
3. 3**Acetabulum: the socket**The socket in the pelvis that meets the ball at the top of the thigh bone.
4. 4**Pubis**The front region of the hip bone, joining its partner in the middle.
5. 5**Ischium**The lower, rear region of the hip bone.

A guide to the main landmarks. Your own scans are needed to show where a tumour lies and what the proposed operation would remove.[1][4][5]

Removal involving the socket affects hip stability. Elsewhere, the key issue may be continuity between the pelvis and spine. Some limited resections preserve enough stability to avoid bone reconstruction. Removal of pubic bone often needs soft-tissue repair without a replacement bone segment.[1]

A drawing alongside your scan can make the socket and the planned area of removal easier to understand. It also gives you something concrete to return to when unfamiliar names become confusing.

What does “internal hemipelvectomy” mean?

Internal hemipelvectomy means pelvic tumour resection that preserves the leg. External hemipelvectomy includes amputation. Preserving the limb requires consideration of both adequate tumour removal and the function expected afterwards.[1]

These names describe very different operations. The team should describe the proposed operation in plain language, including which decisions are settled and which still depend on further assessment.

What can reconstruction involve?

Published approaches include prosthetic implants, bone grafts, graft-and-implant combinations and selected operations without formal bony reconstruction. These are different ways of managing a surgical defect, rather than a menu from which every patient can choose the same options.[2]

A hemi-pelvic endoprosthesis replaces the hip joint and part of the pelvis. The operation also involves the surrounding muscles, which may need reattachment where possible. Understanding those repairs helps put the implant itself in context.[3]

Soft-tissue reconstruction may cover exposed structures, fill spaces left by removal and repair support around the abdominal wall or pelvic floor. Some patients need a tissue flap or mesh. The plan can require orthopaedic and plastic surgical expertise.[1]

Removing the tumour, supporting the remaining bone and repairing the surrounding tissues are different parts of the operation. Your plan should explain which of these are needed.[1][3]

Dr. Vishnu's perspective

With a pelvic reconstruction, I want the discussion to cover what is being removed, what we hope to achieve afterwards and what another operation could involve if a problem develops. Tell me which everyday tasks matter most to you. Walking, getting out of bed and managing at home deserve a specific discussion alongside the proposed reconstruction, without promising the same recovery for everyone.

How should I interpret the risks?

Complications can include infection, wound-healing problems, nerve or blood-vessel injury, blood clots and failure of the reconstruction. Their relevance depends on the operation. An implant also introduces concerns such as loosening or dislocation.[2]

Published comparisons cannot identify one reconstruction as best for everyone or predict your personal complication risk precisely. The extent of removal and the reconstruction being considered matter more than a single pooled figure.[2]

More about the evidence

A 2026 systematic review pooled retrospective studies, mainly of sacrum-sparing resections. Differences in patients, operations and reporting limit comparisons between techniques.[2]

What should the recovery discussion cover?

After a pelvic endoprosthesis, physiotherapy includes getting in and out of bed, walking with appropriate aids and managing stairs. Occupational therapy can help with dressing and equipment for home. Movement precautions are used to protect against hip dislocation, with instructions provided by the treating team.[3]

For this type of pelvic endoprosthesis, rehabilitation guidance includes ongoing review, a home exercise programme and communication with local therapists. The details and timing still need to fit the operation you have had.[3]

Imagine the route from bed to bathroom at home. Are there steps, a floor-level toilet or an upstairs bedroom? Who could help during the day? Those details belong in the rehabilitation discussion. The team should give you and the person helping you clear written instructions about permitted weight-bearing and movement, tailored to your operation.

Frequently Asked Questions

Does hemipelvectomy always mean amputation?

No. Internal hemipelvectomy preserves the leg. External hemipelvectomy, also called hindquarter amputation, removes it along with the pelvic resection. [1]

Does everyone need a metal pelvic implant?

No. Some resections need no bony reconstruction; others use grafts, implants or combinations. The location and remaining stability guide that decision. [1]

Is a pelvic endoprosthesis the same as a hip replacement?

An ordinary hip replacement replaces the joint's ball and socket surfaces. A hemi-pelvic endoprosthesis also replaces part of the pelvis. [3] [4]

Will I walk normally after a pelvic endoprosthesis?

Normal walking cannot be promised. Recovery needs assessment and guided rehabilitation, including walking aids where needed. Ask your team what they expect for your operation and how progress will be reviewed. [3]

> Your consultation

Discuss your pelvic tumour reconstruction plan

To discuss a proposed pelvic bone tumour operation and reconstruction, you can book a consultation with Dr. Vishnu Baburaj at Aster MIMS Kannur.

Book a consultation Plan your visit

Travelling to Kannur

If travelling from outside Kannur, arrange the appointment before booking travel.

Preparing for your consultation

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