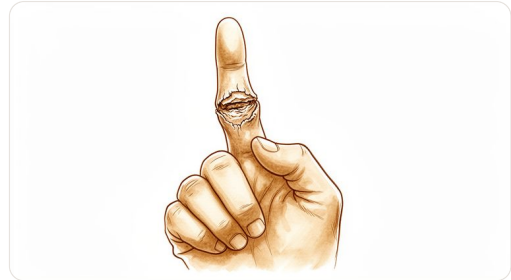


PIP Joint Fusion

X-ray after a PIP joint fusion: a single compression screw locks the middle joint of the finger at a comfortable angle. The bones knit together over six to eight weeks, removing pain from a worn-out joint.

Kieran Hirpara 4.0



At-a-glance recovery. Pooled from 15 published studies — your own pace will vary.

LIGHT DUTIES	MOST EVERYDAY ACTIVITIES	FINAL OUTCOME PLATEAU
desk work, driving, daily tasks	manual work, sport, gym	pain and strength
8 weeks	3-6 months	12 months
Patients returned to work after a median of 8 weeks following PIP arthroplasty, though fusion techniques may vary.	Residual minor pain may persist for up to 3 months, with full functional recovery and fusion consolidation typically occurring by 6 months.	Maximum improvement and plateau in range of motion and strength are typically noted within the first post-operative year.

Why this operation has been suggested

This operation, called a PIP joint fusion, joins the bones of your middle finger joint so they grow together into one solid piece. Your surgeon likely suggested this because you have severe wear-and-tear arthritis, a complex injury, or a failed joint replacement that has not improved with non-surgical care. While other treatments like splints or therapy are tried first, surgery is recommended when these options no longer relieve your pain or restore stability.

The main goal is to stop the painful movement that causes you discomfort and to provide a stable finger for daily tasks. Although some patients may still feel mild pain for up to 3 months, the procedure aims to give you lasting relief and a functional hand. This approach is often chosen when other joint replacements have failed or when the joint is too unstable to support normal use.

Before the operation

You will need to fast before your surgery and stop certain medications as your surgeon advises. Please arrange a lift home and bring a list of all your current medicines. Wear comfortable clothing for the day. You may need X-

rays, blood tests, or an anaesthetic review to check your health and plan the procedure. Your surgeon will use a single open incision over the joint to perform the fusion. This approach allows direct access to the area while keeping the operation straightforward.

On the day

You will arrive at the hospital and meet your anaesthetist to discuss your care. This operation is done under general anaesthetic. You will be fully asleep for the operation. Some patients may also have a regional nerve block for post-operative pain relief – the anaesthetist decides on the day based on your individual circumstances.

Your surgeon will make a single conventional incision over the finger to perform the procedure. You will then be moved to the operating theatre where the team works safely. After the surgery, you will wake up in recovery where nurses will monitor you closely before you go home.

What the operation involves

Your surgeon will make a single cut over the finger joint that needs fixing. Inside, they will prepare the joint surfaces to be joined together. If you have a specific deformity like a swan neck, your surgeon may use a tendon from your finger to create a sling. This helps hold the joint in a bend of 20 to 30 degrees.

To keep the bones steady while they heal, your surgeon will use small metal plates and screws. These are placed through the cut to hold the joint firmly in place. This method allows you to move your finger early after surgery. In some cases, your surgeon might also fix the joint below it at the same time to improve how your finger moves.

Once the work is done, your surgeon will close the cut with stitches. A dressing will be applied to protect the area. The goal is to create a stable, pain-free joint that stays in the correct position.

After the operation

You will wake up in a recovery ward where your pain is managed with standard medication. Your hand will be wrapped in a dressing, and your surgeon may place a splint to hold your finger in a comfortable position. You will be encouraged to move your other fingers gently to reduce swelling. Most patients go home the same day, but an overnight stay is possible if needed. You must have someone stay with you for the first 24 hours to help you. Your surgeon used a single incision over the finger to perform this open surgery.

Recovery

You will likely feel some pain and swelling in your finger during the first few days. This is normal as your body heals. Your surgeon may position your joint at a slight bend to help with healing. You might wear a sling or brace to protect the finger while it rests.

Daily life will feel different at first. You will do gentle exercises to keep the finger moving, but only as your surgeon and physiotherapist guide you. Simple tasks like buttoning a shirt or holding a cup may be tricky until the swelling goes down. Sleep might be uncomfortable at first; try resting with your hand propped up on a pillow to reduce swelling.

As the days pass, the stiffness will ease and movement will return. You will gradually start using your hand more for everyday activities. Your surgeon will tell you when it is safe to drive or return to work based on how well your finger heals. Every person heals at their own pace, so your timeline may differ. Your surgeon and physiotherapist will guide you through each step of this journey.

What can go wrong

Most patients do well, but problems can occasionally happen. Your surgeon and the team monitor you closely to spot any issue early.

Sometimes the joint does not heal solidly. This is called a nonunion. You might notice persistent pain or a feeling that the finger is still moving when it should be stiff. If this happens, you may need another surgery to fix it.

Your finger might not move correctly because of tendon issues. This is called extensor mechanism dysfunction. You may feel a sudden weakness or find you cannot straighten your finger fully. This is a common reason for needing more surgery after a joint replacement.

If you have had a joint replacement before, the surgeon might need to fuse the joint as a backup plan. This is called arthrodesis. While this can help, it is not always perfect and can still cause problems. You might experience fair to good results, but complications are possible.

Younger patients sometimes face higher chances of needing another surgery after a joint replacement. This is especially true if the original problem was caused by an injury.

If a serious infection occurs, the surgeon might need to perform a staged procedure. This means having surgery in two separate steps. Major complications happen less often with this two-step approach than with a single surgery, though the risk is still present.

The complications table on this page lists typical rates if you want the specifics.

When to call us

Call us if you have a fever, increasing redness, or discharge from your wound. Contact us for sudden severe pain, new numbness, or if you cannot move your finger. Go to emergency care immediately for calf swelling or shortness of breath. These signs need urgent assessment to keep your recovery on track.

CQ HAND + UPPER LIMB

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PIP Joint Fusion

Complication rates from published literature

Pooled from 15 published studies. These are population-level rates, not your individual risk — your surgeon will discuss what applies to you.

COMPLICATION	REPORTED RATE	NOTES
Reoperation	15.0%	Overall reoperation rate for nonunion, infection, or hardware issues.
Cold intolerance	10-20%	Increased cold sensitivity common; typically improves over 6-12 months.
Hardware removal	9.4-25.0%	Often due to painful or prominent hardware; higher rates reported with tension band and K-wire fixation.
Adjacent joint stiffness	5-10%	DIP and MCP joint stiffness from immobilisation; responds to hand therapy.
Delayed union	5-10%	Prolonged healing requiring extended protection.
Pain	5-10%	Persistent discomfort at the fusion site.
Paresthesias or altered sensation	4.0-38.0%	Numbness or tingling from digital nerve injury, with most improving over 3-6 months.
Infection	2.2-17.9%	Most commonly reported complication after nonunion; superficial infections respond to oral antibiotics while deep infections may require implant removal, debridement, and revision fusion.
Amputation	1.9-7.9%	Rare but reported in salvage cases or severe infection scenarios.
Nonunion	1.8-10.0%	Failure to fuse varies widely; screw fixation has significantly lower rates (3.0%) compared to wire (8.5%); risk factors include smoking, diabetes, inflammatory arthritis, and infection.
Malunion or poor fusion angle	Rare	Fusion in unacceptable position; may require revision.
Wound healing problems	Rare	Dorsal skin necrosis or dehiscence; risk with smoking and diabetes.

COMPLICATION	REPORTED RATE	NOTES
Hardware failure or implant breakage	Rare	Implant breakage before fusion is complete.
Recurrent deformity	Rare	Swan-neck or boutonniere may recur if tendon imbalances not addressed.

I have read this information and have had the opportunity to ask Dr Hirpara questions about the procedure, its expected recovery, and the complications listed above.

PATIENT – PRINT NAME

SIGNATURE

DATE