

Anatomic total shoulder replacement

Replacement of the ball and socket of the shoulder, including stemless designs. For patients, physiotherapists, and GPs.

Prof. Mohamed A. Imam

MD, MSc (Hons), D.SportMed, PhD, FRCS (Tr & Orth)

Consultant Orthopaedic Surgeon: upper limb, sports injuries, and complex trauma

Rowley Bristow Orthopaedic Centre, Ashford and St Peter's Hospitals NHS Foundation Trust

www.TheArmDoc.co.uk

The plan at a glance

The tendon at the front of the shoulder (subscapularis) is detached and repaired to reach the joint. It needs twelve weeks to heal. Assisted movement starts early. Strengthening waits.

	Phase 1 Weeks 0 to 2	Phase 2 Weeks 2 to 6	Phase 3 Weeks 6 to 12	Phase 4 After 12 weeks
Sling	On day and night, off for exercises	On until week 4, then wean. Off by week 6	None	None
Movement	Pendulums. Assisted lift to 90°, outward turn to 30°	Assisted lift as comfort allows, outward turn to 30°	Active, unaided. Building to full range	Full range, stretch the end of range
Load	A cup of tea, elbow at the side	A cup of tea, elbow at the side	Up to 2 kg. No resisted inward turning	Progressive strengthening
Review	Wound check at 2 weeks	Clinic and X-ray at 6 weeks	Clinic at 12 weeks	Clinic and X-ray at 12 months

Darker shading means tighter restriction. Times are guides. Your surgeon's instructions take precedence where they differ.

Seek advice urgently if

- The wound becomes red, hot, or swollen, or it leaks or opens.
- You have a fever or feel unwell.
- Pain suddenly increases, or you feel a pop at the front of the shoulder and cannot turn the arm inwards.
- The shoulder changes shape or locks after a fall or a sudden movement.
- New numbness, tingling, or weakness develops in the arm or hand.
- The hand becomes cold, pale, or blue.

Call 999 or go to the Emergency Department for shortness of breath or chest pain.

For anything else on this list, contact your surgical team the same day. Out of hours, call NHS 111.

Phase 1

Protect: weeks 0 to 2

Aims: control pain, protect the tendon repair and the wound, start gentle assisted movement.

Do

- Wear the sling day and night. Take it off to wash, dress, and exercise.
- Move the fingers, wrist, and elbow fully, several times a day.
- Start pendulum exercises from day one.
- Lying on your back, lift the operated arm with the other hand to 90°, within comfort.
- With the elbow at your side, turn the forearm outwards with a stick to 30°.
- Sleep propped up on pillows, with a pillow behind the elbow.
- Keep the dressing dry until the wound check at 10 to 14 days.

Avoid

- Lifting the arm unaided.
- Turning the arm outwards beyond 30°.
- Reaching behind your back.
- Pushing up from a chair or bed with the operated arm.
- Lifting anything heavier than a cup of tea.
- Driving.

Expected in this phase

The arthritic pain usually goes at once. Wound pain, bruising, and swelling of the arm and hand settle over two to three weeks.

Phase 2

Move with help: weeks 2 to 6

Aims: regain movement with assistance, protect the tendon repair, come out of the sling.

Do

- Wear the sling until week four. Wean after that. Discard it by six weeks.
- Continue pendulums and assisted lifting. Go beyond 90° as comfort allows.
- Use a stick, a pulley, or table slides. The other arm does the work.
- Keep the outward turn to 30°.
- Use the hand at waist level with the elbow at your side.
- Massage the scar once the wound has fully healed.

Avoid

- Lifting the arm unaided against gravity.
- Turning outwards beyond 30° or reaching behind your back.
- Pushing: doors, chair arms, trolleys.
- Lifting anything heavier than a cup of tea.
- Any activity with a risk of falling.

Move on to Phase 3 when

The six-week X-ray is satisfactory and assisted lifting reaches beyond shoulder height.

Phase 3

Active movement: weeks 6 to 12

Aims: lift the arm unaided, regain range, return to light daily tasks.

Do

- Start lifting the arm unaided. Begin lying down, then sitting, then standing.
- Stretch gently into outward turn. The 30° limit no longer applies.
- Reach behind the back gently, within comfort.
- Add static (isometric) deltoid and outward-turn exercises.
- Exercise in a pool once the wound has healed.
- Use the arm for light tasks up to shoulder height, then above.

Avoid

- Resisted inward turning: pushing doors, tucking in tight clothing with force.
- Lifting more than 2 kg.
- Resistance bands and weights.
- Body weight through the arm.
- Sudden or jerking movements.

Move on to Phase 4 when

Twelve weeks have passed, and you can lift the arm above shoulder height without hitching the shoulder.

Phase 4

Strengthen and return: after 12 weeks

Aims: restore strength, return to activity, protect the implant for life.

- Start resistance work with bands, including inward turning. Build load gradually.
- Strengthen the rotator cuff, deltoid, and shoulder blade muscles.
- Keep stretching the end of range.
- Return to golf, swimming, and gardening in stages.

Looking after the replacement

Improvement continues for 12 to 18 months. Avoid repeated heavy lifting, above about 10 kg, and contact sport for life. They wear and loosen the socket. Report any new pain or loss of movement, even years later.

Return to activity

Typical times from surgery. Each depends on comfort, movement, and healing.

Activity	From	Condition
Desk work	2 to 4 weeks	One-handed, in the sling
Driving	6 to 8 weeks	Out of the sling, able to control the wheel. Tell your insurer.
Light tasks to shoulder height	6 weeks	Satisfactory six-week review
Swimming, breaststroke	12 weeks	Active lift above shoulder height
Light gardening	12 weeks	No heavy digging
Light gym resistance	12 weeks	Low load, high repetition
Golf	4 months	Putting and chipping from 12 weeks
Doubles tennis, bowls	4 to 6 months	Good range and strength
Heavy manual work	Not advised	Discuss with your surgeon
Contact sport	Not advised	Risk to the implant

When to slow the protocol

Some patients need more time. Your surgeon will tell you if any of these apply.

- **Rotator cuff repair at the same operation.** Unaided lifting is delayed to eight weeks. Strengthening is delayed to four months.
- **Bone graft to the socket, or revision surgery.** Each phase runs two to four weeks later, guided by X-ray.
- **Half replacement (ball only).** The same phases apply.
- **Smoking and diabetes.** Both slow healing. Stop smoking and vaping nicotine. Keep blood sugar well controlled.

Prof. Mohamed A. Imam

Consultant Orthopaedic Surgeon

Rowley Bristow Orthopaedic Centre, Ashford and St Peter's Hospitals NHS Foundation Trust

www.TheArmDoc.co.uk

This protocol is general guidance for uncomplicated anatomic total shoulder replacement. It does not cover reverse shoulder replacement. It is not a substitute for individual medical advice. Instructions from your own surgeon and therapist take precedence.

Version 1.0, October 2026. Review due October 2028.