

Preparing for Lumbar Disc Replacement Surgery

Your Complete Pre-Operative Planning Guide

8-12 Weeks Before Surgery

Medical Optimisation and Health Assessment:

Smoking Cessation (Absolute Priority):

- **Complete cessation required:** Stop smoking entirely 8-12 weeks before surgery
- **Critical importance:** Smoking significantly impairs healing, increases infection risk, and accelerates disc degeneration
- **No exceptions:** Surgery may be cancelled if smoking continues
- **Support available:** Quitline (13 7848), nicotine replacement therapy, medical assistance
- **Verification:** Carbon monoxide testing may be performed before surgery

Comprehensive Medical Review:

- **General health assessment:** Evaluation of fitness for general anaesthesia
- **Chronic disease management:** Optimise diabetes, blood pressure, heart conditions
- **Medication review:** Discuss all medications, supplements, and herbal preparations
- **Specialist clearances:** Cardiology, endocrinology, or other consultations as needed

Weight Management:

- **Optimise body weight:** Even modest weight loss can improve surgical safety and outcomes
- **Nutritional counselling:** Dietitian consultation if significant weight management needed
- **Exercise within limits:** Maintain fitness within restrictions of your back condition

Vascular Assessment:

Given the anterior surgical approach, vascular evaluation is essential:

- **Vascular surgeon consultation:** Assessment to confirm suitability for anterior approach
- **Imaging studies:** Abdominal ultrasound and CT angiography to evaluate vascular anatomy
- **Individual planning:** Surgical approach planning based on your specific anatomy

6-8 Weeks Before Surgery

Conservative Treatment Completion:

Ensure you have adequately trialled all required non-surgical treatments:

- **Comprehensive medication trials:** Anti-inflammatory drugs and appropriate pain management
- **Structured physical therapy:** Professional physiotherapy program
- **Injection therapy:** Steroid injections when clinically indicated
- **Activity modifications:** Ergonomic improvements and lifestyle adjustments

Specialist Consultations:

- **Pre-operative medical clearances:** Complete any required specialist assessments
- **Anaesthesia consultation:** Discuss medical history and anaesthetic planning
- **Additional imaging:** Complete any remaining diagnostic studies as needed

Psychological Preparation:

- **Realistic expectations:** Understand recovery timeline and potential outcomes
- **Support systems:** Arrange family and friend support network
- **Stress management:** Develop techniques to manage pre-surgical anxiety
- **Educational preparation:** Read all provided materials and attend education sessions

4-6 Weeks Before Surgery

Work and Insurance Arrangements:

Employment Planning:

- **Medical leave:** Arrange appropriate time off work (typically 6-12+ weeks depending on occupation)
- **Income protection:** Activate disability insurance benefits if available
- **Work coverage:** Arrange coverage for essential responsibilities
- **Return planning:** Discuss modified duties or gradual return options with employer

Insurance Verification:

- **Medicare eligibility:** Confirm you meet all criteria for coverage
- **Private insurance:** Verify coverage details and any pre-approval requirements
- **Cost understanding:** Obtain detailed quotes for all anticipated expenses
- **Payment planning:** Arrange financing for any gap payments or out-of-pocket costs

Home Environment Preparation:

- **Support arrangements:** Organise assistance for 2-4 weeks post-surgery minimum
- **Transportation:** Arrange reliable transport to surgery and follow-up appointments
- **Home modifications:** Prepare recovery area and remove safety hazards
- **Recovery supplies:** Stock nutritious foods, medications, and comfort items

2-3 Weeks Before Surgery

Pre-operative Testing:

Complete all required medical tests:

- **Blood tests:** Full blood count, chemistry panel, coagulation studies
- **Cardiac assessment:** ECG, and additional testing if heart conditions present
- **Pulmonary evaluation:** Chest X-ray and function tests if lung disease present
- **Final clearances:** Any remaining specialist approvals

Medication Management Planning:

- **Blood thinner protocols:** Detailed plan for stopping and restarting anticoagulants
- **Diabetes management:** Perioperative glucose control strategy if diabetic
- **Pain medication review:** Optimisation of current pain management

- **Supplement cessation:** Stop herbal supplements that may affect bleeding or healing

Final Preparations:

- **Surgery scheduling:** Confirm date, time, and hospital location
- **Pre-admission clinic:** Attend if required by hospital
- **Documentation:** Complete all consent forms and hospital registration
- **Emergency planning:** Arrange backup plans for any complications or delays

1 Week Before Surgery

Medication Management:

- **Stop blood thinners:** As directed by surgeon (typically 5-7 days before)
- **Avoid herbal supplements:** All natural products that may affect bleeding
- **Continue essential medications:** Blood pressure, heart, diabetes medications unless instructed otherwise
- **Pain medication adjustment:** Follow specific instructions for current pain medications

Physical and Mental Preparation:

- **Gentle activity:** Continue light exercises within comfort level
- **Avoid alcohol:** Alcohol interferes with healing and anaesthesia
- **Adequate sleep:** Maintain good sleep schedule to support healing
- **Stress management:** Practice relaxation techniques and maintain positive outlook

Final Logistics:

- **Transportation confirmation:** Verify arrangements for surgery day
- **Hospital preparation:** Complete registration and understand arrival procedures
- **Recovery area:** Finalise home setup for post-operative care
- **Emergency contacts:** Ensure all family and friends have necessary information

Day of Surgery

Morning Routine:

- **Fasting compliance:** No food or drink for at least 8 hours before surgery (or as specifically instructed)
- **Hygiene:** Shower with regular soap as directed
- **Medication:** Take only approved medications with minimal water if instructed
- **Clothing:** Wear comfortable, loose-fitting clothes suitable for post-operative period

Hospital Arrival:

- **Punctual arrival:** Arrive at scheduled time with all required documents
- **Documentation:** Bring Medicare card, insurance information, medication list, and identification
- **Support person:** Arrange for family member or friend to be present
- **Personal items:** Bring minimal personal items as most will not be accessible during surgery

Pre-operative Preparation:

- **Sequential compression stockings:** Will be fitted to maintain blood circulation and minimise thrombosis risk
- **Bladder catheter:** Placed after anaesthesia to reduce abdominal tension and monitor output

- **Monitoring equipment:** Pulse oximeters on toes to monitor circulation during surgery
- **CellSaver system:** Used to collect and reinfuse your own blood if needed

Special Surgical Considerations

Vascular Collaboration:

Dr Aliashkevich performs lumbar disc replacement with an experienced vascular approach surgeon to minimise risks associated with major vessel exposure. This collaboration:

- Ensures safe exposure of the lumbar spine
- Minimises risk of injury to aorta, vena cava, and iliac vessels
- Optimises surgical approach based on individual anatomy
- Provides expertise in managing any vascular complications

Approach Selection:

The surgical approach (left or right side) is determined by:

- **Level of surgery:** Left retroperitoneal approach usually recommended for L4-5 and L3-4
- **Individual anatomy:** Based on pre-operative vascular imaging
- **Gender considerations:** Right-sided approach may be preferred for L5-S1 in males to avoid superior hypogastric plexus injury
- **Future procedures:** Preserving tissue planes for potential future interventions

Advanced Monitoring:

Throughout the procedure:

- **Continuous pulse oximetry:** Monitoring toe circulation to detect vascular compromise
- **Fluoroscopic guidance:** X-ray confirmation of level and implant position
- **Neurological monitoring:** Assessment of nerve function during decompression
- **Haemodynamic monitoring:** Blood pressure and heart function throughout surgery

Recovery Planning

Hospital Stay Expectations:

- **Duration:** Typically 3-4 nights depending on progress
- **Early mobilisation:** Encouraged within hours of surgery
- **Pain management:** Multi-modal approach using various medications
- **Monitoring:** Regular assessment of neurological function and wound healing
- **Physiotherapy:** Gentle exercises beginning day after surgery

Immediate Post-operative Care:

- **Urinary catheter removal:** Usually next day after surgery
- **Blood thinning medication:** Started to prevent blood clots
- **Compression stockings:** Continued until full mobility achieved
- **Bowel function monitoring:** May experience temporary bloating or constipation
- **Wound care:** Simple dressing management with minimal requirements

Discharge Planning:

- **Physiotherapy assessment:** Evaluation of mobility and safety for home discharge
- **Medication prescriptions:** Pain management and other necessary medications
- **Activity instructions:** Specific guidelines for home recovery
- **Follow-up scheduling:** Appointments for wound check and progress assessment

Nutritional Preparation for Healing

Protein Requirements:

- **Target intake:** 1.2-1.5g per kilogram body weight daily
- **Quality sources:** Lean meats, fish, eggs, dairy, legumes, quinoa
- **Timing:** Distribute protein throughout the day for optimal utilisation
- **Supplements:** Consider protein powder if dietary intake inadequate

Essential Nutrients:

- **Vitamin D:** 2000-4000 IU daily for bone health and implant integration
- **Vitamin C:** 1000mg daily for collagen synthesis and wound healing
- **Zinc:** 15-30mg daily for tissue repair and immune function
- **Calcium:** 1200mg daily for bone health
- **Omega-3 fatty acids:** Anti-inflammatory effects to support healing

Pre-operative Nutrition:

- **Hydration:** Maintain excellent fluid intake up to fasting period
- **Blood sugar control:** Optimise levels if diabetic
- **Avoid alcohol:** Interferes with healing and anaesthesia
- **Limit processed foods:** Focus on whole, nutrient-dense foods

Emergency Planning and Contingencies

Potential Surgery Delays:

- **Illness:** Cold, flu, or other infection requiring postponement
- **Medical instability:** Uncontrolled diabetes, blood pressure, or heart problems
- **Smoking detection:** Continued smoking despite cessation requirements
- **Insurance issues:** Coverage problems requiring resolution

Backup Plans:

- **Flexible scheduling:** Be prepared for potential date changes
- **Support system adaptability:** Ensure helpers can adjust to schedule modifications
- **Financial contingencies:** Understand implications of delays on costs
- **Work arrangements:** Maintain flexibility with medical leave timing

Emergency Contacts:

- **Surgeon's office:** Primary contact for medical questions and concerns
- **Vascular surgeon:** Contact information for approach-related questions
- **Hospital:** Direct contact for admission-related issues

- **After-hours service:** Emergency contact outside business hours

Final Preparation Checklist

2 Weeks Before:

- Complete all pre-operative testing and clearances
- Confirm surgery date, time, and location
- Arrange work leave and insurance documentation
- Begin medication adjustments as directed
- Finalise home preparation and support arrangements

1 Week Before:

- Stop blood-thinning medications as instructed
- Complete home preparation and recovery area setup
- Confirm transportation and support person availability
- Attend pre-admission clinic if required
- Fill prescriptions for post-operative medications

Day Before Surgery:

- Follow all pre-operative instructions precisely
- Get adequate rest and sleep
- Confirm fasting requirements and timing
- Prepare items for hospital stay
- Review emergency contacts and procedures
- Maintain positive mindset and trust in surgical team

Surgery Day:

- Fast as instructed (typically 8+ hours)
- Take approved medications with minimal water only
- Wear comfortable, loose-fitting clothes
- Arrive punctually with all required documentation
- Bring support person for moral support and post-surgery assistance

Remember: Thorough preparation is essential for optimal outcomes from lumbar disc replacement surgery. Dr Aliashkevich's extensive experience since 2012, including single and multi-level arthroplasty and hybrid procedures, demonstrates excellent results with very low complication rates. The motion-preserving approach offers significant advantages over fusion surgery in appropriately selected patients.

This preparation guide provides comprehensive information based on Dr Aliashkevich's surgical protocols and experience. Always follow your surgeon's specific instructions, which may be modified based on your individual medical condition and circumstances.