THE 1% PROBLEM: HOW KNOWN SURGICAL RISK BECOMES MISINTERPRETED AS NEGLIGENCE

*By **Professor Paul Y F Lee**, consultant orthopaedic surgeon, Honorary Professor of Sports Medicine and expert witness*

⇨**IN ORTHOPAEDIC MEDICO-LEGAL PRACTICE** few concepts are as persistently misunderstood as low-probability surgical risk. A complication may be rare, recognised and widely documented, yet once it occurs it is often reinterpreted as evidence of fault.

This phenomenon – which may be termed the 1% problem – arises when probability is retrospectively collapsed into certainty, and risk is mistaken for negligence.

The difficulty is not confined to one side of litigation. It affects claimant and defence cases alike and is driven by a failure to distinguish clearly between risk, mechanism and responsibility.

Risk is not negligence

Negligence requires a departure from reasonable practice. It also requires logic and common sense. Surgery involves intervening in complex biological systems, and even when care is reasonable, adverse outcomes may occur. The fact that a complication is uncommon does not make it illegitimate, nor does its occurrence alone establish breach. A poor outcome is not, in itself, proof of negligent care.

The 1% problem emerges when expert reasoning begins with outcome rather than with the decision making, execution and systems in place at the time. Courts are then presented with conclusions that rely on hindsight rather than disciplined analysis.

Consent and the myth of numerical thresholds

Modern consent law has decisively moved away from percentage-based disclosure. There is no legal rule that fixes material risk at 0.5%, 1% or any other figure. Materiality is contextual. A low-probability risk may be material because of its consequences, the patient's occupation, lifestyle or stated priorities.

Equally, however, consent recognises residual risk. It does not guarantee outcome. The occurrence of a disclosed risk does not retrospectively convert appropriate care into negligence. The 1% problem arises when risk is accepted in theory but treated as unacceptable once it materialises.

When a complication remains a risk – and when it does not

The critical corrective to the 1% problem is mechanism-based analysis. Complications should not be assessed by name alone, but by how, when and under whose control they occurred.

Hip dislocation provides a useful illustration. It is a recognised complication of hip arthroplasty, yet its medico-legal significance varies entirely with context.

A dislocation occurring weeks after surgery, during independent mobilisation, in a patient with recognised instability risk factors, may remain within the spectrum of accepted risk, provided reconstruction was reasonable and precautions appropriate.

By contrast, a dislocation occurring immediately post-operatively – during transfer or recovery, before the patient has mobilised or exercised meaningful control – requires a different analysis. In such circumstances, attributing causation to patient behaviour is rarely logical. Responsibility narrows to two domains: the inherent stability of the reconstruction, and the healthcare system responsible for handling and positioning. What is ordinarily a recognised risk may cease to be one, not because dislocation occurred, but because its timing and mechanism are inconsistent with reasonable care.

Mistake versus negligence

Importantly, not every early dislocation represents negligence. Surgery can involve mishap without fault. The decisive factor is often what happens next.

An early dislocation that is promptly recognised, safely reduced, properly investigated, clearly documented and honestly explained to the patient may represent a complication or operative mishap rather than negligent care.

However, if the event is missed, dismissed, inappropriately attributed to the patient, poorly documented or followed by delayed or incomplete explanation, the focus shifts. What may have begun as a complication can evolve into a breach – not necessarily because the dislocation occurred, but because of a failure to recognise, respond or communicate reasonably once it did.

This distinction is critical. Negligence often lies not in the initial event, but in the unreasonable failure to respond appropriately to it.

Surgeon, system and shared responsibility

The 1% problem is exacerbated when responsibility is forced into a single category. In reality, adverse outcomes often arise from an interaction between surgical execution, implant behaviour, patient physiology and post-operative systems of care.

A mechanically unstable reconstruction may predispose to dislocation. Equally, unsafe handling during transfer can convert a stable construct into an unstable event. Medico-legal analysis must allow for both possibilities and resist the temptation to default either to outcome-based blame or blanket acceptance of risk.

The expert's role

The role of the expert is not to excuse complications nor to assume fault, but to explain why an event occurred, whether it was preventable, and where control lay at the relevant moment. This requires moving beyond labels and percentages and towards structured, logical analysis grounded in mechanism and context.

When that approach is taken, the 1% problem largely dissolves. Some cases will properly support claims; others will not. What matters is that responsibility is attributed on the basis of evidence, reasonableness and common sense – not assumption.

Low-probability risk is an inherent feature of surgery. Treating its occurrence as automatic proof of negligence serves neither patients nor the courts. Understanding when risk remains risk – and when it becomes failure – is where modern medico-legal analysis must now focus. ❑

• Professor Paul Y F Lee is a consultant orthopaedic surgeon, Honorary Professor of Sports Medicine and expert witness specialising in biomechanics, imaging and causation analysis. He and his team at MSK Doctors operate across London and Lincolnshire, with offices in London, Marylebone and near Liverpool Street Station.

Urgent expert opinion can be provided by prior agreement.