Preface

This book aims to guide the reader through the myriad of complications that may occur in patients undergoing cervical spine surgery: in this way, the surgeon can learn how to try to avoid them, when possible, and to tackle them when they have occurred.

It is important to understand the pitfalls from the patient's perspective. Patients seem better disposed to understand that some complications can be intrinsic in this surgery if their original symptoms were more debilitating, and can find a causal link between the symptoms and the complication. On the other hand, it is difficult for patients to accept complications when symptoms leading to surgery were not serious, even though imaging and electrophysiology studies confirmed the correct indication to surgery.

A very important moment in the preparation of the patient to surgery is the process of informed consent.

From my yearly experience in the field of cervical spine surgery, I learned that pitfalls in cervical spine surgery may be divided into unpredictable and predictable. Obviously, only the latter can be considered as avoidable.

A classical example of an unpredictable pitfall is the deep venous thrombosis following technically well-performed surgery on the correct patient, with the correct diagnosis, indication, and with adequate prophylaxis.

The pitfalls defined as avoidable may arise from several factors: wrong diagnosis, wrong indication and wrong surgery (both in excess – i.e. when performing wide stabilisation – or in defect – i.e. performing incomplete decompression).

There are also difficult situations, when the surgeon is forced to operate because the pathology, for example, a tumour, imposes to perform adequate resection of the tumoural mass with the sacrifice vascular or myelo-radicular structures. These pitfalls are predictable, but unavoidable.

Another common pitfall is a false-positive investigation, interpreted as pathological before considering the presenting signs and symptoms. In tertiary referral practice, many patients are seen for the first time after a host of tests have already been performed. Diagnoses formulated only on the basis of tests, which do not take into account the history and clinical examination of the patient, may induce to operate on the images, and not on the patient. At times, we are guilty of not taking a thorough history and not performing a thorough physical examination, and of relying too much on investigations. This can be particularly true for patients who are anxious and afraid, in whom the inexperienced surgeon may be led to operate.

Also, the anatomy of the spine is complex, but the language used to describe pathology may be even more complex. The absence of universal standardisation of spinal nomenclature with respect to the definition of a disk herniation and its different categories, especially regarding type and location, is still a major problem. Classically, in the presence of a report describing a bulging disk as an herniation, the patient will find sooner or later a surgeon who will operate on him/her.

In this era of high technology in clinical medicine, new devices (i.e. cervical arthroplasty) and minimally invasive techniques are proposed for the management of disorders of the cervical spine. However, classical techniques should not be abandoned until strong evidence in favour of new techniques is available.

Surgery is not the only solution to patient's problems: often conservative management is the best solution!

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