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Pituitary Surgery – A Modern Approach

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Ashley B. Grossman London

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Pituitary Surgery – A Modern Approach

Volume Editors

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Foreword

In the time that I have been practising clinical endocrinology, transsphenoidal surgery has gone from being an innovative approach to pituitary adenomas to having become the standard procedure for a whole variety of sellar and parasellar lesions. However, while many practising clinicians refer patients for this procedure on a regular basis, there have been few texts able to explain the details of the technique, its indications and indeed limitations, as well as the newer extensions such as image guidance and endoscopy. I am therefore delighted to welcome this short volume, where Ed Laws and his colleagues at Charlottesville, one of the leading international centers in transsphenoidal surgery, offer an overview of this whole area, including sections on perioperative management and surgical pathology. Together with other international contributors, they also identify the complementary roles of radiosurgery and transcranial surgery in the approach to sellar and suprasellar tumors. I am sure this will be of great value for all who have to deal with these fascinating and ever-challenging lesions.

Ashley B. Grossman, London

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Preface

The management of pituitary adenomas and other sellar tumors is one of the most difficult tasks for neurosurgeons and endocrinologists. The profound systemic sequelae of hypersecretory adenomas and the deleterious effects of local tumor growth must be halted. Medical management, surgical resection, and adjuvant treatment with radiosurgery are just a few of the tools employed by physicians to achieve these goals. The tendency for recurrence, either early or late, demonstrates the need for vigilant follow-up. Optimal treatment requires a multidisciplinary approach; neurological, ophthalmological, and endocrinological testing are all required.

Fortunately, the past decade has seen rapid improvements in the management of patients with pituitary adenomas and other sellar tumors. Technological advances including a better understanding of tumor biology, discovery of molecular events at the basis of tumor development, and development of new equipment to treat the tumors have all been made. The wide range of such advances speaks to the fact that a variety of skills and techniques are typically employed to diagnosis, treat, and follow patients with sellar tumors. The technical and personnel resources of a state-of-the-art medical center are ideally utilized throughout this treatment.

This book aims to provide a comprehensive understanding of the standard of care for treating sellar tumors. The text includes detailed discussions about operative approaches, perioperative management, and adjuvant treatment. In addition, it gives a glimpse of what the future may hold for the treatment of such tumors. In general, the contributing authors have chosen references based upon scientific significance, ease of access, and historical interest.

The fruition of this project was the result of hard work by many people. Unfortunately, it is not possible to adequately acknowledge all those who have helped. However, we wish to call attention to the assistance of several people. First and foremost, we thank the contributing authors for their effort. In addition, Prof. Grossman provided a great deal of stimulation and guidance in this endeavor. The work of Juliane Sättler and Gunhild Hinderling at Karger Publishing proved invaluable.

Finally, we are grateful for the patience and support of our wives, Peggy and Diane.

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