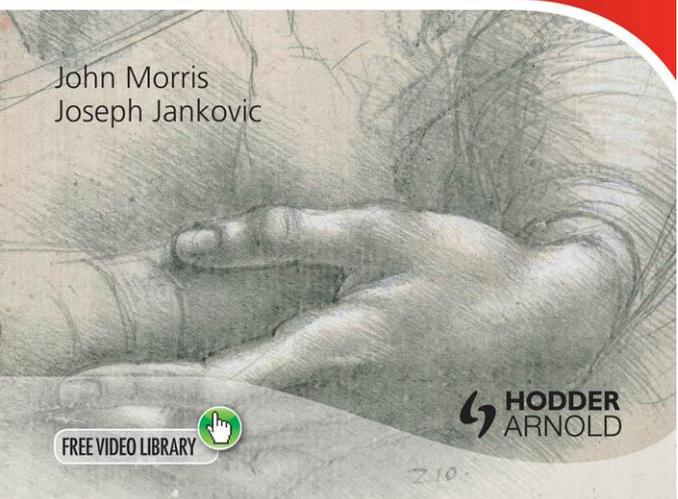




# Neurological Clinical Examination

John Morris  
Joseph Jankovic



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# Neurological Clinical Examination

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# Neurological Clinical Examination

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To study ... disease without books is to sail an uncharted sea, while  
to study books without patients is not to go to sea at all.

*William Osler*

William B. Bean (ed.) (1950) *Sir William Osler Aphorisms*. Henny  
Schuman, Inc., New York. p.76.

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This book includes QR codes which give you instant access to useful video clips. To use the QR codes you need to have a smartphone which has a camera and a QR code reader app installed.

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# Foreword to the Third Edition

The rites of passage from student to graduation, acceptance as a physician and then neurologist, follow much the same pattern in Australia, the United Kingdom and the United States of America. Whereas in practice the history directs physical examination, candidates in a clinical examination may be confronted with a problem as a 'short case', perhaps a single physical sign, to interpret and present a spot diagnosis or a logical approach to investigations and management. Quick thinking is aided by a mental autocue to be rolled out of our brain when required.

In the many years I have known John Morris, he has assiduously recorded physical signs, the history and their significance. When the affected part was stationary, he photographed it. If it moved he took a video. In this way he has built up a collection of clinical signs that has added to his reputation as a teacher and examiner. Earlier editions of this book have proved popular as a supplement to practical work in the ward and clinic as well as being useful as a refresher course before clinical examinations.

John Morris' teaming with Joseph Jankovic in presenting this new edition is a particularly happy one because of their mutual interest in movement disorders which culminated in the video collection presented here.

James W Lance  
AO CBE MD FRCP FRACP FAA

Professor Emeritus of Neurology, University of New South Wales and Honorary Consultant Neurologist at the Prince of Wales Hospital, Sydney, Australia

Past president of the Australian Association of Neurologists is (now the Australian and New Zealand Association of Neurologists).

Fellow of the Australian Academy of Science

Past Vice President of the World Federation of Neurology

Honorary Member of the American Neurological Association and the Association of British Neurologists

Corresponding International Member of the European Federation of Neurological Societies

Regent Member of the American Headache Society, Past President of the International headache Society

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# Foreword to the First Edition

If medical professional life were the Grand National, the MRCP (or FRACP) would be Beecher's Brook – a daunting obstacle approached with caution, attempted with panic and surmounted with relief. Anything which makes this barrier less formidable, even to those on their third or fourth circuit of the course, is to be welcomed.

Dr Morris is a master of the old-fashioned art of clinical observation and examination, and is renowned as a teacher of the subject. His wide experience both as practising clinician, instructor and examiner, makes him a particularly suitable choice as an author of a book of this kind.

It is clearly written, well-illustrated and full of sensible, practical guidance, not only to those taking examinations for whom the neurology case is a particular dread, but for general physicians faced with everyday clinical problems. Even professional neurologists could scan its pages with profit and enjoyment.

Dr RW Ross Russell  
Past President of the Association of British Neurologists

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# Preface to the Third Edition

Time is short and the neurological examination can be long. To make the best use of your time, you need to be able to tailor the examination to the problem in hand. That is what distinguishes the neurological examination from those involving the cardiovascular, respiratory or gastro-intestinal systems where the same general system of examination suffices in most cases. This book outlines an approach to seeking the key clinical signs relevant to those problems uncovered in the course of taking the history. This approach is based on the most likely diagnoses as well as neuro-anatomical considerations.

In its first two editions, the book was aimed primarily at candidates sitting for clinical examinations (in its other sense). It has now been broadened to provide guidance for anyone seeking to improve their skills in the neurological examination. Chapters on assessment of the comatose patient and on psychogenic disorders have been added. These changes have been made in collaboration with my distinguished colleague, Joseph Jankovic, of Baylor College of Medicine, Houston, Texas, who is known throughout the world as a master clinician, particularly in the field of movement disorders.

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# Preface to the First Edition

Most people studying for clinical vivas in medicine dread the neurology case. Unlike cardiology, respiratory medicine or gastroenterology, there is no standard approach in neurology which is appropriate for most cases. In its entirety, the neurological examination is very time consuming; the skill lies in knowing which aspects of the examination deserve particular attention in a given case. This little book offers a simple approach to the assessment of a number of neurological problems which crop up in examinations and everyday practice.

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# Acknowledgements

John Morris thanks his colleagues for their help in producing The Neurology Short Case, out of which this book has grown: Dr Elizabeth McCusker, Professor John King, Professor Christian Lueck, Dr Rick Boyle, Dr Mariese Hely, Dr Susie Tomlinson, Professor Philip Thompson, Dr Nicholas Cordato, Professor Victor Fung (who also helped greatly with the video material); Shanthi Graham (funded in part by the Westmead Charitable Trust), who worked with him over many years on the video database and produced the video clips; Dr Roly Bigg who, through his Movement Disorder Foundation, provided financial support and encouragement to build the video database; ANZAN for helping with the funding of the video database; Faith Oxley for the figures which she drew and the following colleagues for their comments and advice on the first edition: Dr Leo Davies, Dr Jonathon Ell, Dr Ron Joffe, Dr Michael Katekar, Dr Jonathon Leicester, Dr Ivan Lorentz, Professor James McLeod, Dr Dudley O'Sullivan, Dr Ralph Ross Russell, Dr Tom Robertson, Dr Raymond Schwartz, Dr Ernest Somerville and Dr Grant Walker.

Drs Grant Walker, Jon Leicester, Professors Alasdair Corbett, Yugan Mudaliar and Richard Stark provided helpful comments on the new chapter on coma.

Professor Jankovic thanks John Morris for inviting him to join in the writing of this guide to the clinical examination and to contribute additional illustrative and instructive videos. These videos were selected from a library of over 30 000 videos collected at the Parkinson's Disease Center and Movement Disorders Clinic, Baylor College of Medicine over more than three decades.

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# Abbreviations

<b>ADM</b>	abductor digiti minimi
<b>ANA</b>	antinuclear antibody
<b>ANCA</b>	anti-neutrophil cytoplasmic autoantibodies
<b>ANF</b>	anti-nuclear factor
<b>APB</b>	abductor pollicis brevis
<b>A-R</b>	Argyll Robertson
<b>ASOT</b>	anti-streptolysin-O-antibody
<b>AVM</b>	arteriovenous malformation
<b>COMT</b>	catechol-ortho-methyltransferase
<b>CPAP</b>	continuous positive airway pressure
<b>CPK</b>	creatine phosphokinase
<b>CRP</b>	C-reactive protein
<b>CSF</b>	cerebrospinal fluid
<b>CT</b>	computed tomography
<b>DCI</b>	decarboxylase inhibitor
<b>DI</b>	dorsal interosseous
<b>DLBD</b>	diffuse Lewy body disease
<b>DVT</b>	deep vein thrombosis
<b>ECG</b>	electrocardiograph
<b>EEG</b>	electroencephalography
<b>EMG</b>	electromyography
<b>ENA</b>	extractable nuclear antigens
<b>ESR</b>	erythrocyte sedimentation rate
<b>FBP</b>	full blood picture
<b>HIV</b>	human immunodeficiency virus
<b>INO</b>	internuclear ophthalmoplegia
<b>LFTs</b>	liver function tests
<b>MND</b>	motor neurone disease
<b>MRA</b>	magnetic resonance angiography
<b>MRI</b>	magnetic resonance imaging
<b>MSA</b>	multiple system atrophy
<b>PEG</b>	percutaneous endoscopic gastrostomy
<b>PSP</b>	progressive supranuclear gaze palsy
<b>SCA</b>	spinocerebellar ataxia
<b>SLE</b>	systemic lupus erythematosus
<b>SPECT</b>	single-photon emission computed tomography
<b>SSEPs</b>	somatosensory evoked potentials
<b>SSPE</b>	subacute sclerosing panencephalitis
<b>SSRIs</b>	selective serotonin re-uptake inhibitors
<b>VDRL</b>	Venereal Disease Research Laboratories (test)

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