

BOOK REVIEW

Title: CLAYTON'S ELECTROTHERAPY – THEORY AND PRACTICE Eighth Edition
Authors: Angela Forster, MCSP, DipTP and Nigel Palastanga, BA, MCSP, DipTP
Publishers: Cassell Ltd., 35 Red Lion Square, London WC1R 4SG
Price: £7.75 233 pages including glossary, references and index with illustrations

Miss Angela Forster and Mr. Nigel Palastanga have produced this eighth edition of "Clayton's Electrotherapy – Theory and Practice". They are both teachers of physiotherapy and examiners of the Chartered Society of Physiotherapy.

The new edition has been reorganised and revised to make a much more comprehensive teaching book and aid to learning.

Basic physics, electrical theory and quantum physics have been brought together in the first chapter.

Terminology has been brought in line with physics as taught today. Careful distinction has been made throughout the text between electron flow and conventional electric current flow. "Magnitude of electric current" has been used instead of "intensity of current" which is only retained when it refers to the intensity of a stimulus applied to the patient as signified on the controls of various apparatus.

It would perhaps be better for paragraphs referring to main's supply, distribution and house wiring, etc., to come at the end of this first section and not suddenly appear at the end of section 2.

Section 2 is a very comprehensive chapter on electrical stimulation of nerve and muscle. It clearly explains types of current used, techniques of application, physiological effects and indications for use and has good, clear diagrams with some pictures of treatment techniques.

The section on interferential therapy explains the theory and techniques of treatment very well, but does give the impression that machines only produce pre-selected frequency scales for certain conditions. There is a great selection of machines now on the market that give greater flexibility in variability of frequency scales.

Section 3 deals with methods of heating the tissues and deals with short-wave diathermy, infra-red and microwave, as well as electric heating pads and paraffin wax. It is disappointing that no mention is made of pulsed short-wave diathermy and pulsed microwave – apparatus which is being produced by many reputable electro-medical manufacturers and is being used more extensively these days due to the ease of application and the considered beneficial effects.

Conversely, ultrasonic therapy has a section of its own, which is gratifying as this is an electrical treatment given by a totally different method to those already described. Ultrasonic therapy is the use of mechanically produced oscillating frequencies between 750 khz and 3 mhz. The higher frequencies used at low intensities are most effective in the treatment of recent injuries and inflammation, whereas more chronic, deep conditions can benefit from higher intensities – but it is considered advisable never to use more than 1 watt/cm² per 4 cm² for any condition treated.

Other specialist chapters are on ultra violet radiation and cold therapy.

Finally two very important chapters – though not about electrotherapy:

Chapter 7 deals with mechanics, defined as "a branch of applied mathematics treating of motion and tendencies to motion". This chapter is concerned with the study of movement and contains a wealth of vital knowledge for the physiotherapist, clearly explained and presented.

Chapter 8 covers the physics of exercise in water.

The book concludes with a good glossary and useful references.

This is an essential textbook for all Physiotherapy Schools, but even more valuable to the clinicians who wish to update their knowledge of modern electrotherapy.

Margaret John, MCSP, SRP