The Australian Journal of Physiotherapy
Complete electronic copy of abstracts of the 20th Century.

The first volume of the Australian Journal of Physiotherapy was published in 1954. Forty years later the Editorial Board committed to providing an electronic version of the abstracts of the Journal for the 40th year anniversary.

The 40 year index was released at the 12th International Congress of the World Confederation for Physical Therapy in Washington in June 1995. This was the precursor of the AJP foray into electronic publication of the Australian Journal of Physiotherapy.

The release of the extended version of the 40 year index (up to 1999) provides electronic access to all the volumes of the Australian Journal of Physiotherapy. The Australian Journal of Physiotherapy is listed on Medline and abstracts from 1996 are available electronically at PubMed


Readers are directed that manuscripts prior to 1978 (Volume 24) did not have abstracts and keywords at the time of printing. Therefore, for these earlier manuscripts, the abstracts are summaries written by the Editorial Board members in 1994.

It is hoped that the contents of these pages serve as a research and historical resource of the Australian Journal of Physiotherapy.

Dr Garry T Allison

The origin and evolution of the modalities used in physical medicine are described in this paper. Perspectives from the professions of medicine and the importance of physical medicine in the restoration of health and its potential to improve the efficiency of service delivery in the health care system are highlighted.

Keywords: History of Medicine; Physical Medicine; Physical Therapy


This article documents the pathophysiology and classic features of bronchiectasis. Physiotherapy management is discussed with particular reference to aspects of treatment including postural drainage, control of breathing, posture and relaxation. The importance of preventative treatment in the management of this disease is emphasised.

Keywords: Bronchiectasis; Physical Therapy; Respiratory Therapy


Treatment approaches for poliomyelitis employed at the Children's Medical Centre, Boston, and the Warm Springs Foundation, Georgia are discussed comparatively. Principles and methods of treatment, stages of care and follow-up care plans are outlined for each of the facilities. Physiotherapy treatment methods examined include positioning, charting, stretching, muscle re-education, hydrotherapy and functional training.

Keywords: Physical therapy; Poliomyelitis; Rehabilitation


An outline of the general principles of burns treatment is presented, including classification, pathology and surgical care. The role of the physiotherapist in treatment planning and the rationale for intervention is discussed, with particular consideration of the theoretical aspects of burns of varying types and at various stages.

Keywords: Burns; Physical Therapy; Surgery


This paper addresses the impact of psychogenic disorders and psychological components accompanying organic disorders in patients attending physiotherapy clinics. Patients are conceptualised as belonging to one of three subgroups, and those who attend therapy with a real need for emotional support and physical treatment are discussed. Specific attention is given to the
ethical approach of the treating physiotherapist to the point of treatment termination in patients with predominantly psychogenic symptoms.

Keywords: Ethics; Physical Therapy; Psychophysiologic Disorders

The origins and evolution of the physiotherapy profession is presented, documenting the progression of the profession from an art to a science within the context of the period, Christianity, and the Renaissance. Future directions and responsibilities of the profession are discussed, addressing the key areas of teaching and research.
Keywords: History of Medicine; Physical Therapy; Professional Competence


Functional anatomy, pathology and clinical manifestations of backache with sciatica resulting from various lesions of the intervertebral discs are reviewed. The indications and outcomes of medical management, including manipulation, immobilisation and operation are described. Results following operative treatment by the author are recorded as good in 80 per cent of cases. Physiotherapy is reported to be required by few of the author's patients who have undergone surgery, as most rehabilitate themselves gradually.
Keywords: Low Back Pain; Manipulative Therapy; Physical Therapy; Sciatica


This paper reviews recent advances in the field of rheumatology, and focuses on the primary goal of treatment as the prevention of crippling. Treatment methods, with emphasis on the clinical benefits of hydrocortisone injections, and the immobilisation of joints to suppress inflammatory responses and prevent ankylosis are discussed. Particular attention is given to the regions of the upper limb and knee. The physiotherapist's primary role in these patients involves muscle training as a method of preventing deformities due to muscle weakness.
Keywords: Arthritis; Physical Therapy; Arm; Knee Joint


An account of the history of surgery is given from it's origins in Neolithic man of 300,000 BC through to the eighteenth century. From Egypt, where the first recorded operation on soft tissues was performed, the evolution of surgery is traced through the Greco-Roman era, where the art was powerfully influenced by the physicians Hippocrates and Rhazes. The paper concludes with a discussion of the contributions of John Hunter, a surgeon in eighteenth century England, whose approach to disease and its treatment enabled diseases to be managed scientifically on a large scale.
Keywords: History of Medicine; Physicians; Surgery

The characteristics and biologic effects of ultrasound and general principles of application including indications and contraindications are reviewed. Clinical application of ultrasound therapy and its use in diagnosis and research are discussed. The clinical use of ultrasound predominantly focuses on the field of rheumatology, with treatment effects obtained including relief of pain, improvement of flexibility and a decrease in muscle spasm.

Keywords: Physical Therapy; Rheumatology; Ultrasonic Therapy


This article outlines a new approach to rehabilitation of the spinal paraplegic patient adopted at the English National Spinal Unit. This approach encompassed all staff at the unit, and centred around the principle that apart from paralysis of the lower body, a person with paraplegia in most cases is otherwise fit and able to be trained to almost absolute independence. A description of both medical, nursing and physiotherapy interventions to facilitate independence is given, focusing on physiotherapy techniques used in functional re-education, the prevention of contractures and the reduction of spasticity.

Keywords: Paraplegia; Physical Therapy; Rehabilitation


The author presents a detailed description of the structural aspects and functional significance of peripheral nerve injuries. Diagnostic issues, possibility of recovery and rate of regrowth specific to each of the three types of nerve lesions are noted. Aims and methods of physiotherapy interventions are discussed, with particular attention to the use of massage, splinting, mobilisation and muscle re-education as modalities to provide an optimum environment for recovery and to facilitate the integration of returned movement into normal functional patterns. The primary importance of physiotherapy in the management of causalgia and phantom limb pain is reviewed.

Keywords: Movement Dysfunction; Nerve Tissue Injuries; Physical Therapy


The role of physiotherapy in childbirth is described as one which enables the mother to remove fear, use energy efficiently and cope with pain and difficulties encountered during labour. Prenatal exercises, a description of labour and techniques used by the mother during labour are presented. The advantages of relaxation in childbirth are outlined.

Keywords: Labor; Pain; Physical Therapy; Prenatal Care


Recent developments in the field of medical electricity are described, along with their corresponding values and limitations. Microwave treatment, ultrasonics, electrical stimulation of denervated muscle, electrical testing of nerve lesions and electrophrenic stimulation are covered. The author considers ultrasonic therapy to have a clear biologic effect, but is best kept in reserve.
and used where other forms of physiotherapy fail. The modality of electrical stimulation has undergone the greatest advance in the last ten years, including elimination of the ionic effect during galvanic stimulation and more accurate current prescription. A detailed description of Intensity-Time curves for use as a supplement to the Galvanic-Faradic test is included.

Keywords: Diathermy; Electric Stimulation Therapy; Physical Therapy; Ultrasonic Therapy


Advances in the knowledge of neuromuscular relationships have allowed a greater understanding of muscle proprioception and its role in postural activity. The author discusses the fundamental physiological properties of reflexes, facilitation, inhibition, and excitation, conduction and response. These principles are then applied to treatment approaches used in physiotherapy.

Keywords: Neurophysiology; Physical Therapy; Posture; Proprioception


The author follows the development of physiotherapy in South Australia spanning a period of almost fifty years. The review documents among other achievements the opening of a physiotherapy department at the Royal Adelaide Hospital, the establishment of a Diploma of Physiotherapy at the University of South Australia, the development of treatment for poliomyelitis in South Australia, and the passing of the Physiotherapists' act in 1945.

Keywords: Physical Therapy; Poliomyelitis; Professional Practice


The author examines how traditional views of the control of movement may be modified in the context of recent advances in knowledge. The anatomical and physiological basis of the traditional theory is reviewed, and current concepts are presented and contrasted. It is concluded that the possible variations in the control of movement are far greater than the older more rigid concept allowed, and this perspective can be supported by observations during clinical practice.

Keywords: Movement; Neuroanatomy; Neurophysiology


The aim of physiotherapy after tendon repair in the hand is normal relaxed action of the fingers to enable the patient to close or open their hand completely. This paper reviews current methods utilised in this area of rehabilitation. The author outlines a regime of splinting, active movements and movement re-education within a time scale to determine treatment progression.

Keywords: Hand; Physical Therapy; Rehabilitation; Tendon Injuries

The purpose of this article is to apply the description of the role of physiotherapy in rehabilitation to a wider field than has been previously conceptualised. The goal of rehabilitation is stated to be the restoration of the patient to a self-caring state, or as far as their condition will permit. This article analyses the role of the physiotherapist in accomplishing this goal, addressing the areas of personality, qualifications, rehabilitation techniques, evaluation program, types of disabilities and the duties of the physiotherapist in team work. The author comments on the need to alter training approaches to allow students to accommodate the new regime.

Keywords: Physical Therapy; Rehabilitation; Self Care (Rehabilitation)


This article is a descriptive account of the method and organisation of physiotherapy intervention in poliomyelitis patients in Victoria. Physiotherapy services are commenced shortly after the onset of disease consisting of active treatment and rest in splints. When possible patients are sent home to continue studies or other pursuits alongside treatment. Throughout the rehabilitation process patients are encouraged to be as independent as possible, and those with residual weakness are monitored regularly following rehabilitation.

Keywords: Physical Therapy; Poliomyelitis; Rehabilitation


The status of geriatric care in Australia is contrasted to that of the United Kingdom, observed by the author while attending the Third Congress of the International Association of Gerontology, London 1954. The author participated in inspections of various rehabilitation centres for the aged as part of the Congress, and the observations are recorded according to each facility visited. Care of the elderly is reported to be more advanced in the United Kingdom than Australia, and it is concluded that much work remains to be done if the standard of care in Australia is to be comparable to that overseas.

Keywords: Aged; Medicine; Physical Therapy; Rehabilitation

Principles of clinical research work are addressed within the categories of the principles underlying the testing of methods of treatment, selection of a research project, and the posing of appropriate questions. Limitations of experiments, planning and administration of clinical trials, group comparability and assessment of progress are also discussed. The author has attempted to demonstrate that carefully planned clinical research work is able to be undertaken by an individual therapist or the staff of a department, and advocates this as a necessary process to assess treatment techniques and gain scientific credibility to further the profession of physiotherapy.

Keywords: Physical Therapy; Professional Competence; Research


A history of the development of techniques of hip arthroplasty, two methods currently used in Melbourne and the technique of pseudoarthrosis of the hip joint are described. Indications for operation, after-care, physiotherapy and expected progress are presented. It is concluded that although the surgical techniques of hip arthroplasty have not been perfected, the procedures hold value for those with crippling hip disease.

Keywords: Arthroplasty; Hip Joint; Hip Prosthesis; Physical Therapy


This article reviews the neurophysiology of peripheral motor neurones prior to classifying the various muscular diseases by dividing the common atrophies and dystrophies into clinical groups. The classifications include progressive muscular dystrophy, dystrophy combined with myotonus, neural progressive muscular atrophy, spinal progressive muscular atrophy and amyotonia congenita. Principle features, symptomatology, pathology and course are outlined for each of the diseases within each classification. The author acknowledges that there is still much to learn about this group of diseases, and until the aetiology is understood therapeutic measures which prevent, arrest or cure these diseases are unlikely to be developed.

Keywords: Muscular Atrophy; Muscular Dystrophy; Neurophysiology; Peripheral Nerve Diseases


This paper deals with techniques and principles of proven value and common usage in many rehabilitation organisations, with emphasis on post-war work in the development of civilian rehabilitation services for the Commonwealth Government in Victoria. The success of rehabilitation is defined as the extent to which the remedial team can effectively pool their abilities and control their individuality in a concerted attack on the total problems of disablement. It is hoped that the services providing rehabilitation in the community will expand and place an increasing demand on the physiotherapy profession for physiotherapists trained in the area.

Keywords: Disabled; Physical Therapy; Rehabilitation

This article discusses a neurophysiological treatment approach for cerebral palsy, arguing that the traditional methods of treatment formulated with an orthopaedic orientation are unsuitable for use in these patients with disordered motor function. The abnormal patterns of movement observed in patients with cerebral palsy are related to the release of reflex activity, and treatment techniques to overcome these influences and promote skilled movement are presented. The treatment approach centres around the inhibition of abnormal reflex activity and the facilitation of normal automatic movement patterns, and its theoretical background is proposed. Keywords: Cerebral Palsy; Movement Dysfunction; Physical Therapy


The author describes her experiences in the teaching of physical education and the associated study of children's natural movements as forming the basis from which physical education teachers work. Qualities of movement are considered in terms of movement of the human structure. The much criticised lack of progression of this method of movement education is dismissed by the author as the child's growth is considered to be the yardstick of progression. Keywords: Child; Motor Skills; Movement; Physical Education and Training


A brief history of the evolution of man precedes an address of the functional aspects and comparative differences associated with the evolution and structure of the human brain. The significance of the forebrain as the location for the seat of motor control and value of inhibitory mechanisms within this functioning are outlined. Emphasis is placed on the concept of 'nothing' as an active cerebral activity, a concept reinforced through evidence of areas of the brain set aside to ensure adequate inhibition. Keywords: Neural Inhibition; Neuroanatomy; Neurophysiology


The issue of maternal deprivation is introduced with two brief case studies establishing the detrimental effect of prolonged separation of a child from it's mother. A film taken to document objective information on the behaviour of a child upon separation of it's mother is presented, and a synopsis given. Analysis of the film follows, highlighting the child's reactions both within and following the situation of separation from the mother. Keywords: Child Behavior; Child, Hospitalized; Maternal Deprivation

This paper describes a study of the functional outcome of patients who have undergone neurosurgery for the excision of brain tumours. Two hundred and thirty-five patients with intracranial meningiomata underwent operative treatment between 1938 and 1953, and two hundred and five survived longer than six months postoperatively. The surviving patients as an unselected sample were traced, and an attempt was made to assess and grade their disabilities via personal interrogation, or more commonly by letters to either the patient or their doctor. The study utilises a scale of disability to classify work capacity. It was found that over a third of cases were classified as moderately, severely or totally disabled, translating to a disability range between returning to different work allowing for a definite limitation in their powers since operation, and total dependence. Discussion follows on the types of disability experienced, pathologic causes and location of the excised tumour.

Keywords: Brain Neoplasms; Disabled; Outcome Assessment (health care)


Muscle imbalance in arthritic conditions is the primary cause of many deformities, and it's aetiology, effects and management are presented in this article. These deformities can be prevented by muscle re-education, avoiding flexed positions, and splinting during periods of acute inflammation. The author stresses the importance of teaching patients to be their own physiotherapists in order to be on guard against the loss of muscle balance.

Keywords: Arthritis; Exercise Therapy; Muscular Atrophy; Physical Therapy


Derangements of movement and posture occur in a variety of conditions treated by physiotherapists. In this article the author reviews the significance of understanding the basic mechanisms of posture and applying this knowledge scientifically in the formulation of treatment procedures. The myostatic reflex and the role of the muscle spindle and its associated small motor fibre system are discussed in detail with respect to other modifying factors producing activation or inhibition of this system.

Keywords: Movement Dysfunction; Neurophysiology; Physical Therapy; Posture


Early diagnosis and treatment are important in the management of children with the various manifestations of cerebral palsy. This paper aims to cover the field of child development, with special reference to the acquisition of locomotor and manual skills. It is through intimate knowledge of infants at different ages that the subtle departures from the scheme of normal development can be detected by a physiotherapist and treatment prescribed if required. The locomotor and manual skill aspects of normal development are reviewed.

Keywords: Cerebral Palsy; Infant; Movement; Physical Therapy;

The history, technique and applications of glossopharyngeal breathing for independent ventilation in the presence of respiratory muscle paralysis are outlined with reference to respiratory poliomyelitis patients at Fairfield Hospital. Advantages, limitations, contraindications and teaching notes on the technique are presented. Comments are also included on the manufacture and use of chest pieces, and these are compared with box respirators. Clinical experience has shown that a chest piece providing adequate ventilation allows a patient much more freedom than previously available with a box respirator.

Keywords: Physical Therapy; Poliomyelitis; Respiratory Therapy; Ventilators


A history of thoracic surgery, including the discovery of the function of the lungs, the development of techniques to prevent lung collapse during intrathoracic surgery and the evolution of surgical techniques for various congenital and acquired conditions is recorded. The field of thoracic surgery is described by the author as a rapidly advancing field, requiring yearly overseas travel to remain abreast of developments in the field.

Keywords: History of Medicine; Intraoperative Complications; Thoracic Surgery


The management of injury and disease almost always includes a period of rest in bed. The numerous and diverse risks associated with bed rest are discussed in this paper, including the danger of falling out of bed and the psychological dimensions of bed rest. The life threatening development of venous thromboses, pulmonary complications and other affections reported to be significant factors in the cause of mortality following confinement to bed are reviewed.

Keywords: Bed Rest; Disease; Mortality; Risk


Principles of rehabilitation of the physically handicapped are discussed, and the relatively poor progress made in Australia towards providing rehabilitation services in this field compared with overseas countries is noted. The establishment of rehabilitation centres able to combine services addressing all of the factors contributing to a patient's handicap is viewed as a more effective method of delivering rehabilitation services.

Keywords: Disabled; Health Services; Rehabilitation

A brief historical account of electrical treatment for flaccid muscles is followed by an explanation of faradic-galvanic currents and their use in the testing and treatment of nerve lesions. Clinical application of the intensity-duration stimulator is illustrated, and examples of strength duration curves for normal, denervated and re-innervating muscle are analysed.

Keywords: Electrodiagnosis; Electric Stimulation Therapy; Nerve Tissue Injury; Physical Therapy


The management of a woman's emotions in labour is viewed by the author as being of vital importance to the successful outcome of the process. Assistance from outside the mother is usually required for a successful emotional labour. The margin for improvement in the management of labour in Perth's obstetric hospitals is noted as associated with the lack of support given by obstetric staff. It is suggested that the physiotherapist occupies an ideal position to manage the physical and emotional aspects of normal labour, and components of this role are discussed.

Keywords: Emotions; Labour; Outcome Assessment (health care); Physical Therapy


This paper describes a treatment for the relief of constipation through the use of abdominal wall contractions to re-coordinate the digestive reflex. It is founded on the recognition of the alimentary tract as a reflex mechanism embracing all the organs of digestion, which becomes active in response to the stimulus of food placed in the mouth. The treatment rationale and method is discussed, with emphasis on the importance of timing in re-coordinating the digestive reflex and full and true muscle contractions of the abdominal wall.

Keywords: Abdominal Muscles; Constipation; Digestive System; Physical Therapy;


Both the physician and physiotherapist are challenged by the therapeutic complexities associated with hemiplegia. Many of these patients can be rehabilitated to a state of self-sufficiency. The author reviews the evaluation of disabilities in hemiplegia, and describes objectives of the rehabilitation program and treatment procedures currently used.

Keywords: Exercise Therapy; Hemiplegia; Physical Therapy; Rehabilitation


The author reviews the foundations of orthopaedics. This encompasses concepts relevant to physiotherapists in the areas of normal growth and development of children, kinesiology, normal body mechanics and posture, and the pathology of injury. Treatment methods applied by physiotherapists in orthopaedics are discussed. Success in treatment is viewed as the understanding of each orthopaedic case, and physiotherapists are advised to avoid adopting a routine system of treatment.
Keywords: Orthopedics; Pediatrics; Physical Therapy


This paper analyses the nature of dyspnoea in terms of its physiology and pathology, and examines the use of breathing exercises in the light of this analysis. Breathing exercises are designed to eliminate wasteful or uncoordinated movements, and on achievement of which the respiratory effort is likely to be reduced and the degree of dyspnoea lessened.

Keywords: Dyspnea; Physical Therapy; Respiratory Therapy


The modality of heat, its mode of action and value in relieving the symptoms of pain and stiffness in rheumatic disease is presented. The wax bath is discussed as a technique of applying a moist heat treatment, and detailed instructions for the construction of a wax bath are recorded.

Keywords: Heat; Physical Therapy; Rheumatology


This paper documents three case studies illustrating the importance of physiotherapy in the management of orthopaedic patients. The diagnoses include meniscectomy, chronic non-specific infective arthritis, osteoarthritis of the ankle joint with persistent subluxation and decalcification characteristic of Sudeck's atrophy, and intervertebral disc degeneration.

Keywords: Arthritis; Orthopedics; Physical Therapy;


There is a growing interest in the comparatively new areas of physical medicine and rehabilitation from physicians and other related specialities. A recent history is given of rehabilitation of the long-term-ill, and the development of Highland View Hospital as an institution that places great emphasis upon rehabilitation. Staffing, patient diagnostic categories, teaching and research activities at the hospital are reported. Continuing changes in the medical and allied health professions in this field are likely to enable an adequate service to be provided to the long-term-ill and relieve the economic burden on society.

Keywords: Disabled; Physical Therapy; Rehabilitation


The principles of treatment, examination and treatment techniques of the lumbar spine using manipulation are discussed. The importance of continual assessment of the patient's condition is emphasised. Excellent results following the use of these manipulation techniques are reported.

This paper presents an overall picture of the preoperative and postoperative condition and management of patients undergoing mitral valvotomy from a physiotherapy perspective. The anatomy, pathology, preoperative assessment, postoperative assessment, postoperative management and possible complications are discussed. In conclusion the importance of careful patient handling, prevention of fatigue and maintenance of efficient circulation in the lower limbs is stressed.

Keywords: Heart Surgery; Physical Therapy; Postoperative Care; Postoperative Complications


Early conclusions about the training of biceps cineplasty at the Repatriation General Hospital, Victoria are recorded. The general principles of cineplasty training, preparation for operation, postoperative care and muscle motor training are covered for patients undergoing unilateral or bilateral forearm amputation. Although the need for improvement in the design of mechanical hands is acknowledged, the technique described is allowing patients to resume their previous occupations.

Keywords: Exercise Therapy; Muscle; Physical Therapy; Rehabilitation


The general qualifications, training, and scope of the work of speech therapists in Australia, and their approach to the common problem of aphasia is discussed. The definition, aetiology, prognosis, and aims of treatment for aphasia are outlined with reference to integration with other health professionals in a rehabilitation setting.

Keywords: Aphasia; Speech Therapy; Rehabilitation


A general overview of psychology, the clinical psychologist, and observations on aspects of psychological research of interest to physiotherapists are recorded. The inclusion of aspects of psychology directly related to physiotherapists within their training is recommended, and this is supported by discussion of the use of psychology in the practice of physiotherapy. In summary, the author advocates a multi-disciplinary approach to patient care involving the unified participation of all specialities.

Keywords: Physical Therapy; Psychology; Rehabilitation


This article stresses the primary importance of restoring the abdominal and pelvic floor muscles after normal parturition, and the early instillation of a sense of correct posture. An exercise program
trialed on seventy-four patients is outlined, and the rationale and proposed advantages over the previous standard approach discussed.

Keywords: Exercise Therapy; Physical Therapy; Postnatal Care; Posture

The mechanism of respiration in asthma and its significance in physiotherapy is discussed. A physiotherapeutic regimen for asthma is described which incorporates modification of breathing exercises commonly employed. The emphasis on expiration is removed, and attention is focussed solely on inspiration primarily using the diaphragm. These two exercise regimens were examined in a controlled clinical trial. A summary of the results suggest the new modified technique produces a superior outcome.

Keywords: Asthma; Physical Therapy; Respiratory Therapy


The pathology, symptoms, signs and prognosis of atherosclerosis obliterans are reviewed. From the physiotherapeutic point of view, treatment is directed towards improving blood flow and decreasing the disparity between the demand for blood and its supply. Methods used to increase blood flow are discussed in detail. Particular emphasis is given to the importance of walking. The author expresses the hope that this paper will stimulate wider interest in the condition and more detailed care in the early stages of the disease.

Keywords: Atherosclerosis; Physical Therapy; Walking


This article describes current views on the possible causes and clinical features of migraine. Successful treatment of these symptoms by traction and manipulation is demonstrated through a case report. The author remarks in conclusion that some patients with migraine, or symptoms closely resembling migraine, may actually be suffering from a condition of cervical origin which can be relieved or prevented by appropriate manipulation.

Keywords: Manipulative Therapy; Migraine; Physical Therapy


This article records the author's experience with pool therapy, and outlines the rationale, techniques and results gained through this form of therapy at Harlow Wood Orthopaedic Hospital, Nottinghamshire.

Keywords: Hydrotherapy; Physical Therapy; Rehabilitation


This article promotes the value of deep massage as valuable in treating many musculoskeletal disorders. The use of penetrating heat followed by deep massage is suggested as a method for increasing the benefits gained by active exercises. The application and use of deep massage is described for stiff shoulders, stiff and strained knees, stiff ankles, low back strains and spasm in the upper part of the trapezius muscle.
Keywords: Massage; Musculoskeletal Diseases; Physical Therapy

Through perspectives gained from a recent overseas tour, the author believes physical medicine departments in Australia are beginning to fall behind those overseas. The author claims the areas of staffing, equipment and space are in need of expansion, and the rehabilitation centres and therapists operating in these should be under the direct medical supervision of a specialist in the area.

*Keywords*: Consultants; Physical Medicine; Physical Therapy Department, hospital


The history of thoracic surgery is followed from the Hippocratic era to the present time. This review identifies a period of rapid advances in the second half of the nineteenth century when antiseptic surgery and general anaesthesia were discovered. Factors contributing to the delay in the progress of thoracic surgery are identified.

*Keywords*: Anaesthesia, general; Anti-infective Agents; History of Medicine; Thoracic Surgery


This article documents the establishment, treatment approach and outcomes of the Paraplegic Unit at Royal Perth Hospital. Aspects of care within the unit, including clinical assessment, surgical management, nursing management, physiotherapy, dietetic treatment, occupational therapy, and social management are described. The results achieved by the unit, although not yet up to world standards, indicate the future for these patients will be more promising than in the past.

*Keywords*: Paraplegia; Physical Therapy; Rehabilitation


If the approach of physiotherapy in patients with chronic nervous disease is to be worthwhile the author believes it must be carefully planned and focused on gains in functional activity that improve a patient's independence. Methods of treatment planning in these patients are presented that encompass individual treatments, independent activities performed by the patient and group activities.

*Keywords*: Exercise Therapy; Neuromuscular Diseases; Physical Therapy;


The main causes of pain in the upper limb are reviewed, and a few of the more common causes are analysed in detail. These include the scalene syndrome, ulnar neuritis, and carpal tunnel syndrome. Physiotherapy has an important role in the rehabilitation of these conditions that is independent of the need for surgery.

*Keywords*: Arm; Pain; Physical Therapy; Rehabilitation

The anatomy, physiology, pathology, clinical features and treatment of gravitational ulcers is presented. It is caused by defects in venous return of the limb, and keystones of treatment are rest, elevation, massage and firm elastic support. Physiotherapy plays an important role in the treatment of this condition, and this is briefly described.

Keywords: Massage; Physical Therapy; Ulcer


The anatomy of the facial nerve is reviewed and the various lesions which may involve it outlined. The treatment of facial paralysis is described with particular reference to the importance of early and effective splinting and the role of electrical stimulation.

Keywords: Electrical Stimulation Therapy; Facial Paralysis; Physical Therapy


This article reviews objectives and education in relation to physiotherapy in its current clinical and social setting. The recent history of physiotherapy is reviewed. Present educational philosophies and organisational structure among the health care professions are challenged for their concern with prestige and failure to promote an essential collaborative atmosphere between the professions. The author views all vocational and professional life as a form of social activity intimately related to community needs. In conclusion, a desire is expressed for inspired education in the schools, and social awareness to enlighten professional endeavours.

Keywords: Education; History of Medicine; Physical Therapy;


The assessment of hand injuries is discussed with particular reference to the difference between tidy and untidy injuries. Diagnosis of tendon and nerve lacerations, and the management of these conditions is described in detail. The management of associated fractures and procedures available for the replacement of skin loss are discussed. Postoperative problems and causes of unsatisfactory results are outlined, and the role of physiotherapy at each stage is indicated.

Keywords: Hand Injuries; Physical Therapy; Postoperative Care; Tendon Injuries


Physiotherapy in neurosurgical patients is particularly concerned with the maintenance of muscle bulk, the preservation of joint mobility, re-education of limb muscles and rehabilitation. Similar principles apply whether muscular activity is impaired because of paresis, spasticity or loss of effective control. This concept is illustrated in this article by a consideration of traumatic and acquired lesions of the peripheral nerves, spinal cord and brain during the acute and recovery phases.

Keywords: Neurosurgery; Physical Therapy; Rehabilitation

The author views the present state of knowledge of the anatomy of pain as clearly unsatisfactory. The nerve endings, nerve fibres, sensory pathways and central terminations concerned with pain are described. It is believed that the anatomist has not much to discover in future investigations of the peripheral nervous system, although there is still much to be learned in the central nervous system concerning the problems of pain. It is suggested these may be best investigated by a team of scientists from multiple disciplines.

**Keywords**: Pain; Peripheral Nerves; Neuroanatomy


This paper outlines current concepts of the aetiology, diagnosis and management of rheumatoid arthritis. The role of the physiotherapist is viewed as one that addresses the local treatment of inflamed joints and as an important element in the management of the patient as a whole. The unsatisfactory state of facilities for rehabilitation available at present is noted.

**Keywords**: Arthritis, rheumatoid; Physical Therapy; Rehabilitation


The mechanism and control of respiration is outlined, and the effectiveness of physiotherapy in disorders involving respiration is attributed to voluntary control over this process. The pathology, aetiology, clinical picture and treatment regimen for emphysema and bronchitis are discussed. Results observed through implementation of the treatment regimen indicate the majority of patients report subjective improvement in dyspnoea, and increases in the maximum breathing capacity of patients was measured. It is concluded that the effectiveness of treatment is possibly strongly related to the enthusiasm of the staff.

**Keywords**: Bronchitis; Emphysema; Physical Therapy; Respiratory Therapy


The clinical problem of hemiplegia is discussed with particular reference to its frequency and pathogenesis. Clinical features of hemiplegia are briefly outlined and the principles and aims of treatment are defined.

**Keywords**: Hemiplegia; Physical Therapy; Rehabilitation

This paper reviews the current situation of physical medicine in Australia compared with that of overseas nations, and discusses the effects of its presence on physiotherapy. The functions of the specialist in physical medicine are described, and include the provision of an accurate diagnosis and plan of treatment, the improvement of the status of physiotherapy and integration of the rehabilitation team. The author describes the operation of a physical medicine department in England, and the role of the physiotherapist within this structure. It is concluded that a physical medicine department has more to offer than a physiotherapy department.

Keywords: Consultant; Physical Medicine; Physical Therapy; Rehabilitation Centres


An impression of the current status of physiotherapy in the United Kingdom is presented by the Superintendent Physical Therapist at King's College Hospital, London. A description is given of the impact of new therapeutic methods in physiotherapy, and the functioning of the physiotherapy department under the direction of a consultant in physical medicine. Also discussed are the new trends in remedial exercises, team work in management, and resettlement clinics held at the hospital. The author concludes by emphasising the need for physiotherapy to keep pace with the present needs of society.

Keywords: Consultant; Physical Medicine; Physical Therapy; Physical Therapy Department, hospital;


Relevant points in the history and examination of a patient with a suspected lesion of the cervical spine are discussed. Both direct and indirect techniques of manipulation in this region and their indications are described. The treatment approach is illustrated through the presentation of four case histories.

Keywords: Cervical Vertebrae; Manipulative Therapy; Neck; Physical Therapy;


The anatomy of the first lumbar nerve is reviewed and a symptomatic classification of 41 patients with pain related to this nerve with four categories is outlined. The results of treatment by manipulation are good in most instances, but are less satisfactory when the pain begins or is aggravated during some particular phase of the menstrual cycle. A case history is presented for each of the classification groups to illustrate the presenting features, manipulative management and assessment of response.

Keywords: Low Back Pain; Manipulative Therapy; Neuralgia; Physical Therapy

The clinical features and management of peripheral facial paralysis are outlined. The value of physiotherapy in electrodiagnosis and treatment of this common and disfiguring illness is emphasised.

Keywords: Electric Stimulation Therapy; Facial Paralysis; Physical Therapy


This paper reviews the more important and fundamental aspects of rehabilitation in relation to physical education. It deals briefly with historical aspects of physical education, and the training of physical educationalists who wish to work in rehabilitation, research, school sports and the future.

Keywords: Exercise Therapy; Physical Education; Rehabilitation


The factors influencing sputum production in the postoperative phase were investigated in this study. The study involved 33 patients admitted to one of three surgical wards. Sputum collections were performed on the preoperative day and for four days postoperatively. Preoperative postural drainage was performed and breathing exercises taught. Results indicate that patients who had an operation lasting one hour or less produced a significantly smaller volume of sputum postoperatively than those in which the operation lasted longer than one hour. The presence of sputum preoperatively was associated with a significant tendency to produce more sputum postoperatively, and smoking was related to the preoperative production of sputum only. The relevance of these findings to the prevention of postoperative pulmonary complications is discussed.

Keywords: Physical Therapy; Postoperative Complications; Respiratory Therapy; Sputum


In order to specifically address the deficiency in strength of respiratory muscles associated with certain clinical conditions, the resistance breathing tube has been designed to supplement the usual breathing exercises by providing resistance to the muscular effort of respiration. The authors believe the breathing tube offers psychological and physical advantages to the patient with respiratory muscle weakness, and further trials are warranted.

Keywords: Muscle Atrophy; Physical Therapy; Respiratory Therapy


This paper is primarily concerned with concepts relating to alveolar ventilation, though a description of other important aspects of efficient pulmonary function are reviewed. This review is performed in order to enable the aims and role of physiotherapeutic techniques to be viewed in
perspective against the complex background of disordered physiology which characterises the pulmonary diseases. Efficient gas transfer across the alveolar membrane, effective distribution of blood through the capillary bed and efficient alveolar ventilation are addressed. Overall ventilatory capacity and the rationale of physiotherapy in pulmonary disease is discussed, and the need for studies to demonstrate the value of breathing exercises in pulmonary disease is highlighted. Keywords: Blood Air Barrier; Physical Therapy; Respiratory Therapy