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Peter Hoskin Radiotherapy in Practice: No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of Oxford University Press, or as expressly permitted by law, or under terms agreed with the appropriate reprographics rights organization. Enquiries concerning reproduction outside the scope of the above should be sent to the Rights Department, Oxford University Press, at the address above You must not circulate this book in any other binding or cover and you must impose this same condition on any acquirer British Library Cataloguing in Publication Data Data available Library of Congress Cataloging-in-Publication Data Radiotherapy in practice: QZ R] RC Readers must therefore always check the product information and clinical procedures with the most up-to-date published product information and data sheets provided by the manufacturers and the most recent codes of conduct and safety regulations. The authors and the publishers do not accept responsibility or legal liability for any errors in the text or for the misuse or misapplication of material in this work. Except where otherwise stated, drug dosages and recommendations are for the non-pregnant adult who is not breast feeding. With perhaps the exception of a small superficial basal cell carcinoma all patients will require imaging evaluation of their malignancy. Therefore it is essential that the principles of imaging and the specific requirements for each tumour site are clearly understood by those involved in the management of patients with malignant disease to enable optimum use of this essential modality. It will then be essential for assessing the full extent of that tumour and defining the tumour stage by evaluating pathways of direct, lymphatic, and bloodborne spread. The tumour stage is critical to subsequent management and it is therefore vital that appropriate imaging is undertaken at this point. For the patient having radiotherapy, an accurate assessment of the tumour to be treated and of the surrounding organs at risk is critical to the planning of the radiotherapy. Detailed evaluation through diagnostic imaging is essential for delivering optimal radiotherapy. The most important step in radiotherapy planning is tumour localization and, with the few exceptions of readily palpable and visible skin tumours, a full appreciation of the anatomical localization, involvement of surrounding structures, and proximity to critical organs is essential, and can only be provided through appropriate radiological investigations. Following treatment, further management is based on response assessment and continued surveillance in which imaging will play a major part. It is essential to have an understanding of the positive and negative predictive value of a test and the level of reliance that can be placed upon it. This is particularly the case in the response assessment scenario when patients may be subjected to major salvage procedures on the basis of failure to achieve a radiological complete response. It is remarkable that despite technical improvements in the production of plain X-ray 2 INTRODUCTION images and increased understanding of the use of contrast materials it took almost 80 years for the next revolution in imaging to appear in the clinical setting with the introduction of computed tomography CT. Over the subsequent 30 years there has, however, been a major revolution in the imaging world with ever more sophisticated and rapid CT imaging, the advent of clinical magnetic resonance MR , and in the last decade the development of functional imaging techniques harnessing not only CT and MR but also positron emission tomography PET. The result of this dramatic technological change is that a modern cancer centre has a sophisticated range of imaging modalities available for each patient to provide detailed information on both the anatomical distribution and physiological characteristics of the tumour in question. The challenge in this setting is to optimize the use of each modality in order to obtain the most accurate and reliable information possible with the technology available. Imaging is an integral component of many of the stages through which a patient will pass in the radiotherapy department. The technological developments in imaging in recent years

have also driven important changes in the radiotherapy department. For many years imaging information and radiotherapy planning was undertaken in parallel rather than in an integrated fashion. Information from plain radiology film and later CT images would be manually and visually transferred to orthogonal X-ray films taken in the radiotherapy treatment simulator. This was a laborious and relatively inaccurate process. This has now been largely set aside with all modern radiotherapy departments using CT-based planning systems in which a CT scanning sequence is imported into a radiotherapy planning computer system and the treatment volume, together with the organs at risk, are defined on screen on sequential CT images so that an accurate three-dimensional reconstruction is obtained. This is then used by radiation physicists to define the beam sizes, shapes, and contributions to achieve a homogeneous dose distribution within the planning target volume whilst minimizing dose to organs at risk. It also provides information on tissue inhomogeneities for X-ray absorption corrections. For example, lungs will absorb far less energy, having lower electron density than other soft tissue such as skin and muscle. This enables a highly accurate dosimetric plan to be achieved based on the detailed anatomical information provided. Critical to the successful treatment of a patient using this information is that the scanning for dosimetry purposes the planning scan is obtained in identical positions and circumstances to those that will be encountered on the linear accelerator during treatment. This will often be different to those used for optimal imaging sequences, for SUMMARY example the treatment couch is flat rather than scalloped, the patient may need to have their arms raised above their head out of the path of an X-ray beam, and there will be constraints on bladder filling and other physiological parameters. The use of intravenous contrast can be useful in radiotherapy planning as in diagnostic imaging to distinguish vessels from other soft tissue structures such as lymph nodes. Large volumes of oral contrast to outline bowel are not used because large volumes of contrast can alter the absorption characteristics of the dosimetric calculations. In the early years of using CT imaging it was usual for these to be performed on the imaging scanner, often allocating a half-day session to radiotherapy planning scans so that the altered scanning conditions could be accommodated without disruption of the imaging processes. In most modern departments now however, there are dedicated radiotherapy CT simulators designed for the acquisition of radiotherapy planning scans with appropriate couch tops and larger apertures to enable radiotherapy treatment positions, for example with the arms raised, to be accommodated in the scanner. These may produce images which have slightly lower resolution to the diagnostic images and thus not necessarily interchangeable with diagnostic images. Diagnostic scans will still be required to supplement information from the planning scan during tumour demarcation. There are certain sites where MR is superior to CT in demarcating tumour and normal tissue structures: At present however, MR cannot be used in radiotherapy dosimetry. This is related to the distortion characteristics at the edge of the MR field so that the patient outline is less accurate and also the fact that the information on X-ray absorption heterogeneities is not obtained in the process of MR scanning. This remains an investigational area at present and in most cases the diagnostic information from PET will be used alongside the diagnostic CT information during radiotherapy planning rather than integrated into the planning images. Alongside this it is critical to bear in mind that increased availability and use of imaging exposes the patient to a higher concomitant radiation dose, the long-term sequelae of which are as yet to be fully evaluated. Anatomical imaging is the mainstay for patient evaluation; however, functional and hybrid combined functionalâ€”anatomical imaging have acquired an increasing role. To obtain the most accurate and reliable information possible with the most appropriate imaging modality the relative performance of the imaging test has to be defined. Commonly used measures of test performance include: Test performance is also affected by the prevalence of disease in the population: Other parameters that have been used include receiver operator curve ROC analysis, frequency of management change, and costâ€”benefit analysis. Although it has poor sensitivity and specificity, it is widely available and cheap. Digital radiography systems which have replaced conventional films have the advantage that images can be viewed and distributed with a higher patient throughput. Digital detectors also demonstrate increased dose efficiency and a greater dynamic range, potentially reducing radiation exposure to the patient.

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Selected References These references are in PubMed. This may not be the complete list of references from this article. Prevalence and treatment of chronic airways obstruction in adults over the age of Chronic obstructive pulmonary disease in the United Kingdom: Curr Opin Pulm Med. Obstructive lung disease and low lung function in adults in the United States: How to develop cost-conscious guidelines. The significance of respiratory symptoms and the diagnosis of chronic bronchitis in a working population. Lung volumes and forced ventilatory flows. Official Statement of the European Respiratory Society. Eur Respir J Suppl. Health status measurement in chronic obstructive pulmonary disease. Prognosis in chronic obstructive pulmonary disease. Am Rev Respir Dis. The course and prognosis of different types of chronic airflow limitation in a general population sample from Arizona: Bronchodilator reversibility testing in chronic obstructive pulmonary disease. Bronchodilator response in chronic obstructive pulmonary disease. Assessment of reversibility of airway obstruction in patients with chronic obstructive airways disease. Acute bronchodilator trials in chronic obstructive pulmonary disease. Alternative methods for assessing bronchodilator reversibility in chronic obstructive pulmonary disease. Interpretation of bronchodilator response in patients with obstructive airways disease. Short term variability in FEV1 and bronchodilator responsiveness in patients with obstructive ventilatory defects. Differences in airway inflammation in patients with fixed airflow obstruction due to asthma or chronic obstructive pulmonary disease. Bronchodilation test in COPD: Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease. Detecting patients at a high risk of developing chronic obstructive pulmonary disease in general practice: Effectiveness of postal smoking cessation advice: Adding spirometry, carbon monoxide, and pulmonary symptom results to smoking cessation counseling: J Gen Intern Med. Acute bronchitis and clinical outcome three years later: Effects of smoking intervention and the use of an inhaled anticholinergic bronchodilator on the rate of decline of FEV1. The Lung Health Study. Behavioral anti-smoking trial in chronic obstructive pulmonary disease patients. Psychopharmacology Berl May; 2: The effects of counseling on smoking cessation among patients hospitalized with chronic obstructive pulmonary disease: Smoking cessation in patients with chronic obstructive pulmonary disease: Smoking cessation and lung function in mild-to-moderate chronic obstructive pulmonary disease. Effects of randomized assignment to a smoking cessation intervention and changes in smoking habits on respiratory symptoms in smokers with early chronic obstructive pulmonary disease: The clinical effectiveness and cost-effectiveness of bupropion and nicotine replacement therapy for smoking cessation: Dose-response study of inhaled salbutamol powder in chronic airflow obstruction. Dose response to inhaled salbutamol in chronic obstructive airways disease. Efficacy of inhaled metaproterenol and orally-administered theophylline in patients with chronic airflow obstruction. Bronchodilators in chronic air-flow limitation. Effects on airway function, exercise capacity, and quality of life. Acute response to bronchodilator. An imperfect guide for bronchodilator therapy in chronic airflow limitation. Should study subjects see their previous responses: Domiciliary nebulized terbutaline in severe chronic airways obstruction. Mechanism of bronchodilator effect in chronic airflow limitation. A comparative study of atropine sulfate and isoproterenol hydrochloride in chronic bronchitis. Response of patients with chronic obstructive lung disease to the regular administration of nebulized isoproterenol. A double-blind crossover study. Breathlessness and exercise tolerance in chronic airflow obstruction: Curr Med Res Opin. Evaluation of domiciliary treatment with terbutaline by wet nebulisation in patients with chronic bronchitis and emphysema. Aust N Z J Med. Bronchodilator treatment for partially reversible chronic obstructive airways disease. The efficacy of orally administered theophylline, inhaled salbutamol, and a combination of the two as chronic therapy in the

management of chronic bronchitis with reversible air-flow obstruction. Domiciliary nebulised salbutamol solution in severe chronic airway obstruction. Regular versus as-needed short-acting inhaled beta-agonist therapy for chronic obstructive pulmonary disease. Cholinergic bronchomotor tone in COPD. Estimates of its amount in comparison with that in normal subjects. Bronchodilating effects of combined therapy with clinical dosages of ipratropium bromide and salbutamol for stable COPD: Comparative dose-response study of three anticholinergic agents and fenoterol using a metered dose inhaler in patients with chronic obstructive pulmonary disease. Effect of salbutamol and ipratropium bromide on airway calibre and bronchial reactivity in asthma and chronic bronchitis. A comparison of the effect of ipratropium and albuterol in the treatment of chronic obstructive airway disease. For COPD a combination of ipratropium bromide and albuterol sulfate is more effective than albuterol base. Extended therapy with ipratropium is associated with improved lung function in patients with COPD. A retrospective analysis of data from seven clinical trials. Use of a long-acting inhaled beta2-adrenergic agonist, salmeterol xinafoate, in patients with chronic obstructive pulmonary disease. Inhaled formoterol dry powder versus ipratropium bromide in chronic obstructive pulmonary disease. Efficacy of salmeterol xinafoate in the treatment of COPD. Effects of regular salmeterol on lung function and exercise capacity in patients with chronic obstructive airways disease. Quality of life changes in COPD patients treated with salmeterol. Efficacy of inhaled salmeterol in the management of smokers with chronic obstructive pulmonary disease: Long-term treatment of chronic obstructive pulmonary disease with salmeterol and the additive effect of ipratropium. Formoterol in patients with chronic obstructive pulmonary disease: Comparison of the efficacy, tolerability, and safety of formoterol dry powder and oral, slow-release theophylline in the treatment of COPD. Health outcomes following treatment for six months with once daily tiotropium compared with twice daily salmeterol in patients with COPD. Effectiveness of fluticasone propionate and salmeterol combination delivered via the Diskus device in the treatment of chronic obstructive pulmonary disease. Combined salmeterol and fluticasone in the treatment of chronic obstructive pulmonary disease: A 6-month, placebo-controlled study comparing lung function and health status changes in COPD patients treated with tiotropium or salmeterol. Effects of theophylline on diaphragmatic strength and fatigue in patients with chronic obstructive pulmonary disease. N Engl J Med. Theophylline and mucociliary clearance. Theophylline improves global cardiac function and reduces dyspnea in chronic obstructive lung disease. J Allergy Clin Immunol. Pharmacokinetic interactions between theophylline and other medication Part I. ABC of monitoring drug therapy. Effect of theophylline on exercise performance in patients with severe chronic obstructive pulmonary disease. Physiological and neuropsychological effects of theophylline in chronic obstructive pulmonary disease. Isr J Med Sci. Treatment of chronic obstructive pulmonary disease with orally administered theophylline. A double-blind, controlled study. Theophylline improves gas exchange during rest, exercise, and sleep in severe chronic obstructive pulmonary disease. Cilomilast, a selective phosphodiesterase-4 inhibitor for treatment of patients with chronic obstructive pulmonary disease: Effects of inhaled and oral glucocorticoids on inflammatory indices in asthma and COPD. The effects of inhaled fluticasone on airway inflammation in chronic obstructive pulmonary disease: The effects of inhaled corticosteroids in chronic obstructive pulmonary disease:

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Noelle O'Rourke, Beatson Oncology Centre, Gartnavel General Hospital, Glasgow, G12 0YN, UK. calendrierdelascience.come@calendrierdelascience.com Noelle.O'Rourke@calendrierdelascience.com This is an updated version of the original review published in Issue 4, The use of concurrent chemotherapy and radiotherapy in non-small.

Chapter 7 : Lung Cancer in Practice

16 N. O'Rourke, F. Macbeth, Is Concurrent Chemoradiation the Standard of Care for Locally Advanced Non-small Cell Lung Cancer? A Review of Guidelines and Evidence, Clinical Oncology, , 22, 5, CrossRef.

Chapter 8 : Annals of Oncology

Noelle O'Rourke. Consultant Clinical Oncologist Michael Sproule. Consultant Radiologist. NHS Greater Glasgow and Clyde: Evelyn Thomson. Lead Nurse, Lung.

Chapter 9 : Radiotherapy in Practice - Imaging - Peter Hoskin; Vicky Goh - Oxford University Press

Nick P Rowell, Kent Oncology Centre, Hermitage Lane, Maidstone, Kent, ME16 9QQ, UK. nrowell@calendrierdelascience.com In a previous meta-analysis of adjuvant chemotherapy in NSCLC there was a 13% reduction in the risk of death in patients receiving radical radiotherapy. This overview specifically excluded.