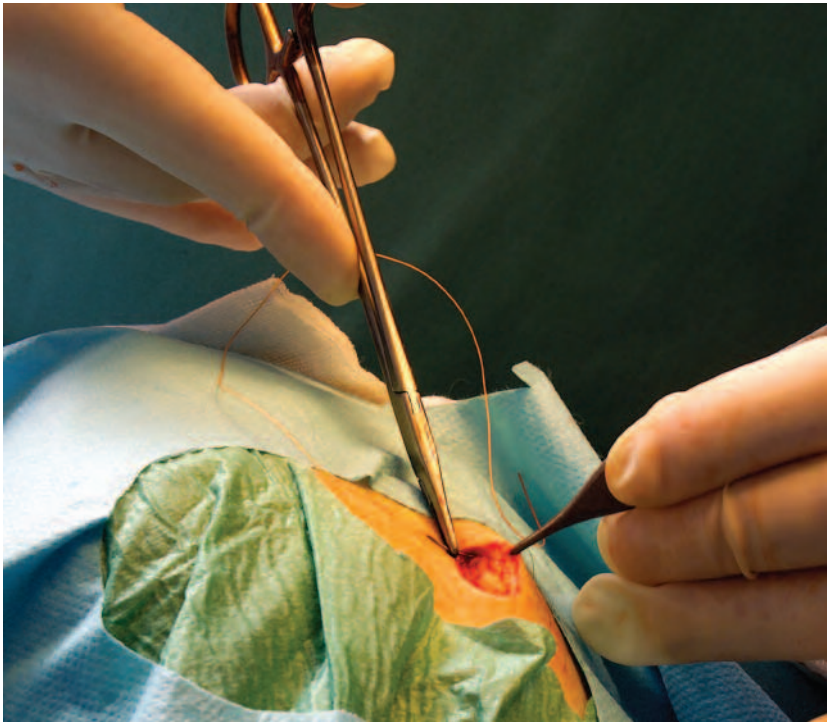
Fast Facts

Fast Facts: Minor Surgery

Christopher J Price and Rodney Sinclair

Second edition



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Declaration of Independence
This book is as balanced and as practical as we can make it.
Ideas for improvement are always welcome: feedback@fastfacts.com

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Fast Facts: Minor Surgery
First published 2001
Reprinted 2005, 2006
Second edition January 2008

Health Press Limited, Elizabeth House, Queen Street, Abingdon,
Oxford OX14 3LN, UK
Tel: +44 (0)1235 523233
Fax: +44 (0)1235 523238

Book orders can be placed by telephone or via the website.
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For telephone orders, please call +44 (0)1752 202301 (UK and Europe),
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(Asia–Pacific).

Figures in Chapter 3 are reproduced courtesy of the Department of Dermatology and the Media Resources Centre, University Hospital of Wales, Cardiff, UK, and Medical Illustration UK Ltd, Chelsea & Westminster Hospital, London, UK.

A CIP record for this title is available from the British Library.

ISBN 978-1-903734-01-8

Price CJ (Christopher)
Fast Facts: Minor Surgery/
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Medical illustrations by Dee McLean, London, UK.
Typesetting and page layout by Zed, Oxford, UK.
Printed by Fine Print (Services) Ltd, Oxford, UK.

Text printed with vegetable inks on biodegradable and recyclable paper manufactured from sustainable forests.

Low emissions during production


Low chlorine


Sustainable forests

Glossary of abbreviations

ABCD rule: a simple guide to the clinical features of melanoma (see page 36)

BCC: basal cell carcinoma

CNCH: chondrodermatitis nodularis chronica helicis

EFG: 'elevated', 'firm' and 'growing for more than 1 month'

EMLA®: eutectic mixture of local anesthetics

MM: malignant melanoma

PDT: photodynamic therapy

SCC: squamous cell carcinoma

Introduction

Dermatological surgery is practiced routinely in primary care, and most minor procedures are straightforward and require minimal time. Success depends on the practitioner's ability to recognize lesions, choose and plan appropriate treatment and perform surgical procedures.

This new edition of *Fast Facts: Minor Surgery* briefly describes the diagnosis of skin lesions, though the reader is encouraged to consult *Fast Facts: Skin Cancer* and other texts for more detail. The surgical techniques discussed and illustrated in this text are current best practice. These should be learned by supervised practice; this book is not an instruction manual for novices. All skin surgery causes scarring, and using the correct technique will only minimize this. The surgeon must always be confident that the procedure is necessary and that the likely degree of scarring is appropriate for the type of lesion, particularly when treating benign skin conditions.

A patient may request removal of a benign lesion purely to improve their cosmetic appearance. Before such surgery is contemplated, the surgeon should be satisfied that the outcome will improve the appearance of the patient. Furthermore, the patient must be made aware that the lesion is benign and that there is potential for scarring and complications.

During surgery, the patient's skin, which is the first line of defense against invading pathogens, will be breached, making him or her more vulnerable to cross-infection. It is therefore important that the surgeon and any assistants are free from bacterial or viral infection to reduce this risk. Conversely, staff are potentially at risk of infection from the patient, and every effort should be made to avoid needle-stick injury and to minimize handling of infected tissue. Finally, any excised specimens (including lesions believed to be benign) should be sent for pathological examination, and the report read, recorded and acted on by the surgeon.

This second edition of *Fast Facts: Minor Surgery* provides an overview of the good practice and operative set-up required for dermatological surgery, the skin lesions commonly encountered in primary care and the various techniques and procedures involved in their treatment. It is hoped that the information presented will benefit you, your colleagues and your patients.

1 Operative set-up and equipment

The minimum requirements for safe practice-based surgery are discussed in this chapter. It is vital that any operative intervention is performed in a facility set up for the purpose, with proper regard to sterile procedure. Access to equipment to deal with potential complications should be a prerequisite; training and confidence to use these facilities will ensure patient (and operator) safety.

Operating facilities

Room. The shape and size of the operating room is usually dictated by available space. However, space around the couch must be sufficient for access with an operating trolley and there should be access at the head for airway protection should the patient faint. Resuscitation equipment must be easily accessible in the same room. A clean sink for hand-washing and a dedicated 'dirty area' for used instruments and dirty swabs must also be provided. Adequate work surfaces and storage facilities should also be available.

Lighting. The operating room should have bright background lighting to ensure operator and assistant safety. If the operating field is well lit but the remainder of the room is dim, used instruments or sharps on the operating trolley may be overlooked, resulting in needle-stick injury. It is also safer in the event of a patient requiring resuscitation.

The surgical light should be mounted on a flexible arm to allow variation in focus. This can be achieved conveniently with a ceiling-mounted lamp. Floor-based lamps are adequate but leave trailing wires that can be dangerous. Also, the surgical light should not emit too much heat as this may cause the patient or surgeon discomfort during long procedures and can lead to drying of surgically exposed tissues. Many 'cold' lights are available.

Couch. The type of couch required for the operating room will depend on the surgeon's preference and the type of operations performed. If

long complex operations are undertaken, a good-quality couch, with the facilities for height adjustment and tilting the patient into a head-down position, together with a multiposition backrest, is essential. If the couch is used for small procedures only, such as curettage and cautery, then a static one is adequate.

Resuscitation equipment. Minor surgery inevitably involves some blood loss and the use of local anesthetic. Although it is unlikely that patients will be hemodynamically compromised, some may faint from the psychological effect of seeing their own blood. Also, local anesthesia carries a small risk of syncope, allergy or, much less frequently, anaphylaxis, so a patient may need cardiac and/or respiratory support. Resuscitation facilities should always be close at hand in the same room in case of either a vasovagal or anaphylactic attack.

Table 1.1 shows the minimum requirements and optional extras for resuscitation equipment. The operator and assistant should be fully trained to use the equipment, which must also be regularly inspected and maintained. It is a good idea to keep a laminated sheet showing drug doses printed in large typeface with the equipment; in an emergency, this is one thing less to worry about.

Cautery. Simple heat cautery units are inexpensive and are sufficient for all but the most complex skin surgery. If more complex surgery is undertaken, or if the practice has a large turnover of operations, then an electrocautery unit may be a viable alternative. An electrocautery unit can be used in deep wounds and achieves hemostasis with less tissue damage. These units are expensive and are not necessary for superficial surgery or minor excisions in which bleeding can be controlled by pressure or tying off blood vessels.

Chemical agents for hemostasis include aluminum hydrochloride, trichloroacetic acid, phenol and silver nitrate (Table 1.2). These agents act either by precipitating proteins, thus triggering coagulation pathways, or by simple tissue destruction. Chemical cautery is used mainly for superficial wounds following shave excision or curettage.

4 Treatment planning

Remember, all surgery causes scarring. The stages in planning successful treatment are discussed in this chapter and are shown in Figure 4.1. Factors that must be considered before embarking on surgery include:

- diagnosis
- necessity
- cosmetics and regional anatomy
- potential complications
- comorbidity/drugs
- surgical technique and aftercare.

Diagnosis

If a working or differential diagnosis is not made, then a surgical plan cannot be formulated. The ability to recognize lesions with confidence and knowing what to do having made the diagnosis, are the most important and difficult aspects of skin surgery.

Necessity

When a diagnosis has been made, the need for an operative procedure can be assessed. The removal of a benign lesion can be justified only if it is in a cosmetically unimportant position or if removal is necessary because of irritation or repeated trauma. In cosmetically sensitive areas, removal of benign lesions should be undertaken with the utmost care; referral to experts may be deemed necessary by either you or the patient. There is no point in removing benign lesions yourself if the patient requests excision by a plastic surgeon, because such patients are likely to be intolerant of even a minor complication.

Cosmetics

A number of factors, including the skill of the surgeon, influence the final cosmetic result. It is important to use the correct surgical technique for the condition to be treated and to use the least invasive method available.

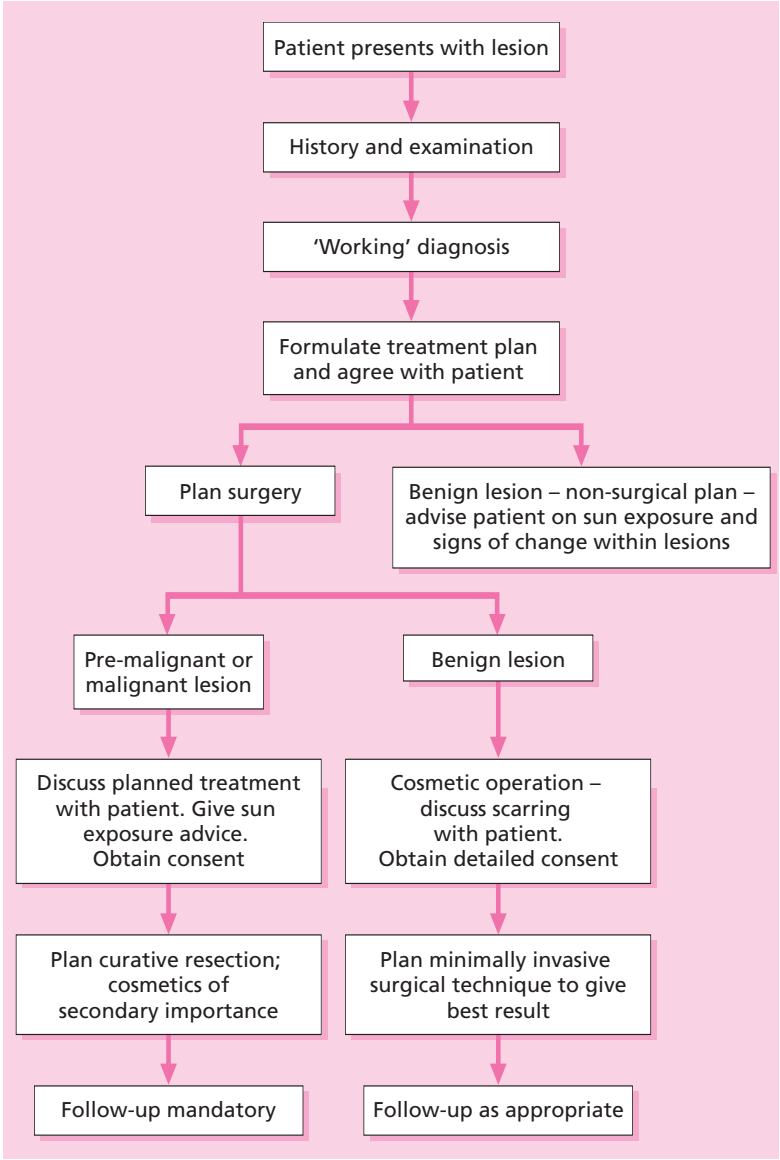

Figure 4.1 Planning a successful treatment.

Site. Some sites produce notoriously poor cosmetic results; for example, surgery on the upper trunk may leave a hyperemic or keloid scar (see pages 49–50).