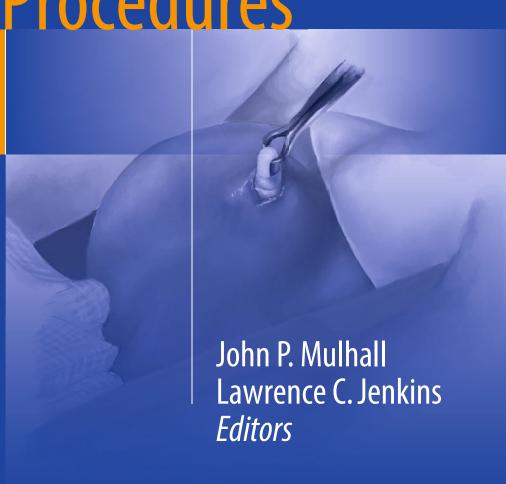
# Atlas of Office Based Andrology Procedures





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John P. Mulhall • Lawrence C. Jenkins Editors

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ISBN 978-3-319-42176-6 DOI 10.1007/978-3-319-42178-0

ISBN 978-3-319-42178-0 (eBook)

Library of Congress Control Number: 2016951719

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Printed on acid-free paper

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# **Preface**

Andrology is the medical specialty that deals with male health, especially as it pertains to problems of the male sexual and reproductive system. Andrological issues in urologic practice and indeed in general medical practice are commonly encountered, yet perplexing for many clinicians. Sexual dysfunction is gaining increased attention in the media as it becomes more acceptable to discuss previously taboo topics. These are often topics that men suffered from but either did not know to ask or were too uncomfortable to ask with their physician. Sexual dysfunction is a common problem that can have a major impact on a patient's quality of life, including their relationship and treatment satisfaction.

There is an increasing trend towards more medical care being delivered in the office setting rather than in an operating room. Office-based andrology procedures are more common than other areas of urology but yet not as well trained during urology residency training. The increasing pressure of duty hours on urology residency training leaves residents often lacking comfort with these procedures.

The purpose of this text is to act as a resource to aid andrology practitioners, including physicians, nurse practitioners/physician assistants, clinical trainees, nurses, medical assistants, and others, who perform or assist in-office andrology procedures. We tried to cover the most common procedures within a typical andrology office practice. However, some procedures were excluded because they are not very common in an office setting. We hope this book will be found useful to those who have had no specific andrology training and to those who are simply out of practice.

New York, NY New York, NY John P. Mulhall Lawrence C. Jenkins

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# Chapter 1 **Focused Genital Exam**

John P. Mulhall and Lawrence C. Jenkins

### Introduction

The patient's medical history can often lead to a diagnosis before an examination or adjuvant testing has been performed. A thorough medical, sexual, and fertility history will help identify (1) the nature of the problem(s), (2) the chronology of the complaints, (3) the interaction between multiple sexual complaints, (4) potential etiological (risk) factors, and (5) the impact of the problem on the patient, his partner (where one exist), and their relationship, sexual and otherwise (Table 1.1).

#### **Focused Genital Examination**

The physical examination complements the history and, while sometimes noncontributory, is an essential component to confirm a suspected diagnosis or pick up an otherwise unsuspected etiology to the patients problem (Table 1.2). Useful anatomical images can be found in figures 1.1, 1.2, and 1.3.

## The Penis

For the man with sexual problems, penile examination is essential and, while often unremarkable, for example, in a young man with premature ejaculation, may shed light on the patient's complaint(s) (micropenis, Peyronie's disease plaque,

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Table 1.1 Key history points

History of medical comorbidities (especially vascular risk factors)
Congenital or childhood diseases
Psychological disorders (anxiety, depression)
Prior surgeries (especially pelvic or genital)
Medications
Social (smoking, alcohol, recreational drugs, occupational exposures)
Exercise capacity
Duration of sexual dysfunction or infertility
Onset (sudden, gradual) and chronology of complaint(s)
Situational factors
History with partner(s)
Aggravating/alleviating factors
Current and prior sexual function
Penile pain (characterize)
Discuss ejaculation (presence/absence, normal/premature)
Discuss orgasm (presence/absence, normal/delayed)
Assess for sexual incontinence
Reproductive history (prior pregnancies/children, duration trying to conceive)
Prior evaluation(s)
Prior treatments

**Table 1.2** Key exam points

General appearance
Gynecomastia
Hair distribution
Pre-pubic fat pad
Scars from prior surgery
Penile skin assessment
Penile meatus assessment
Penile stretch and length
Penile plaques (tenderness)
Testicular volumes
Epididymal presence and consistency
Vasa deferentia
Varicocele

diminished penile stretch) and/or may lead to the discovery of an unsuspected problem (hypospadias, phimosis, skin abrasions, sexually transmitted infection-related lesions). Assessing general penile stretch is a good start. As resting penile smooth muscle tone is under adrenaline control, anxious patients will often have a contracted penis, which on stretch will elongate significantly. In some highly

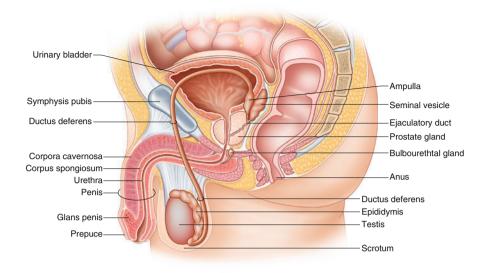


Fig. 1.1 Anatomy of the male pelvis

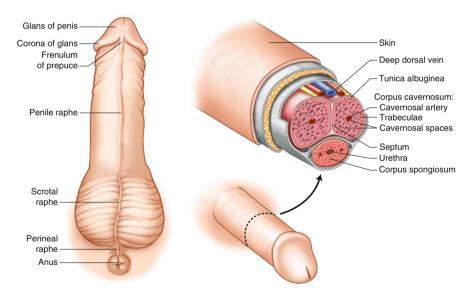


Fig. 1.2 Penile anatomy

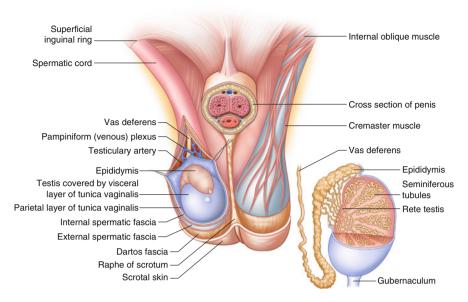


Fig. 1.3 Scrotal anatomy

anxious patients, the resting smooth muscle tone may be high enough that the penis will feel woody throughout, but on gentle stretch (with distraction of the patient), this generally disappears.

Careful palpation of the penile shaft should be performed, from pubic bone to coronal sulcus, to elucidate any plaque (Fig. 1.4). The patient may have more than one plaque present and may have plaques on both the dorsum and ventrum. The latter group of patients will often have no significant deformity, as such plaques counteract each other, but may complain of significant penile length loss. Palpation, applying side-to-side, and dorsoventral pressure are the optimal means of outlining plaque and septal anatomy. Side-to-side compression beginning at the 3 and 9 o'clock positions on the shaft and rolling firmly upward (for dorsal plaque) and downward (for ventral plaque) should be conducted meticulously along the entire shaft. The plaque location, morphology, and approximate size (where possible) should be documented, and measurement of the stretched flaccid length is recommended (Fig. 1.5). We suggest that such measurement be conducted between two fixed points, the pubic bone and the coronal sulcus. Measuring plaque size is surprisingly challenging and difficult to replicate because all methods are subject to intra- and inter-observer variability (Fig. 1.6). Further confounding the problem is the lack of universal agreement regarding the optimal method of measurement. Despite this, the frequency of plaque size being reported in the literature mandates an understanding of the methodology in addition to the limitations. Options include using calipers and rulers during physical exam or utilizing imaging modalities. Plaque size can be documented as either area or less appealingly as the longest plaque dimension.