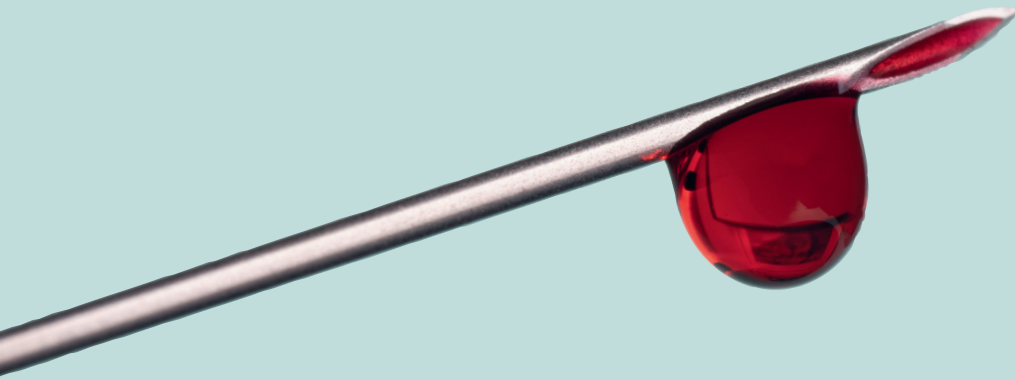




VENIPUNCTURE *for the* APPLICATION *of* BLOOD CONCENTRATES



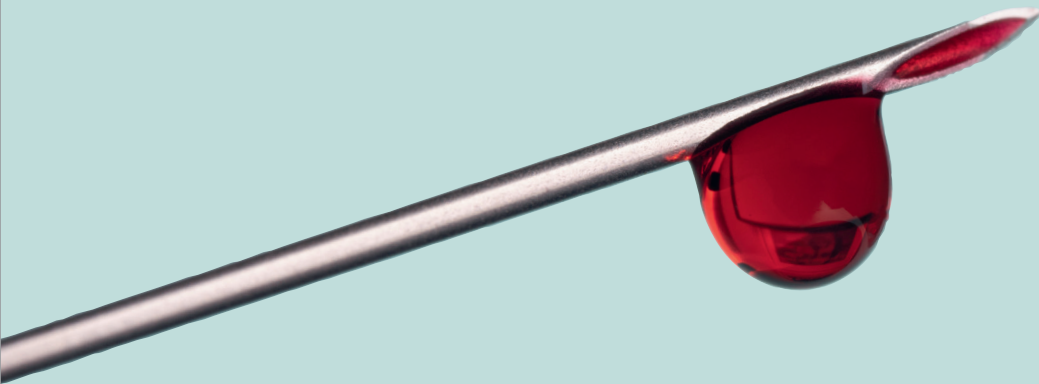
SHAHRAM GHANAATI, MD, DMD, PhD



Venipuncture for the Application of Blood Concentrates

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PREFACE

Blood collection and the preparation of blood concentrates is becoming more commonplace in the dental office. In this, as in every form of treatment, providing high-quality care is essential. Patient safety must be ensured, and the procedures used should be maximally efficient and effective. The foundation for this high level of care lies in the academic and nonacademic training of medical professionals.

With this goal in mind and based on extensive practical experience, I developed this textbook to empower dental professionals to perform blood collection and the preparation of blood concentrates safely, efficiently, and with the best possible results in the dental office. The book will teach you how to puncture a vein and draw blood step by step for the preparation of blood concentrates.

Although the highest priority has been placed on making the content practical and easy to follow, it is crucial to understand that only regular practice will bring the theory to life. Therefore, I strongly encourage you not only to read the procedures presented here but also to actively apply them in your dental office. With each blood draw and each preparation of blood concentrates, you will steadily improve your skills. Because medicine and dentistry are continuously evolving, it is all the more important to stay up to date to ensure the safety of your patients and the quality of your treatment results.



Acknowledgments

My sincere thanks go to all the participants in the Society for Blood Concentrates and Biomaterials (SBCB) beginners and user courses; without their valuable and active participation and the constructive exchanges that took place in these courses, this guide would not have been possible. I would also like to thank all the colleagues and founding and supporting members of the professional society, as well as the entire SBCB team, for their joint participation in this process. Our events to date were made possible to a considerable extent by their tireless and passionate efforts, which have helped the course participants achieve valuable learning experiences and success. Thank you as well to all those who have been open and patient in making changes and adjustments to this textbook to ensure that it will be a valuable guide for dentists and dental assistants to the world of blood collection and blood concentrates.

3D Animations



For better understanding of the content in this book, scan the QR code here to access 3D animations of each chapter with step-by-step description.



VENIPUNCTURE *and* BLOOD COLLECTION OUTSIDE *the* DENTAL CHAIR

Dentists and their practice teams are generally regarded as trustworthy, reliable, and extremely competent in their profession. After all, our professional training makes us experts in many areas, including periodontics, prosthodontics, and endodontics. Not only are we skilled in solving dental problems, but we are also able to keep our patients relatively free from pain and minimize the cosmetic issues associated with dentistry.

Nevertheless, for many patients, oral procedures can be an uncomfortable ordeal, and it is therefore important to build and maintain the patient's confidence. This is especially true when performing venipuncture and blood collection, because these procedures are unfamiliar to most patients in the context of dentistry and may give rise to doubt and skepticism. If the patient perceives any uncertainty in our eyes or facial expressions, they may judge it as incompetence, which can put a lasting strain on the clinician-patient relationship and leave the patient feeling uneasy about further treatment.

It is also important to consider the physical setup for the blood draw. A dental chair with an attached rinsing container leaves only one of the patient's arms available, which is not ideal (Fig 1-1). To avoid the awkwardness and limitations of the dental chair for blood collection, and to make the environment as comfortable as possible for the patient, blood collection is best performed in a different chair, but it must be in





the same room (Fig 1-2). The chair should leave both of the patient's arms accessible, allowing venipuncture of the most visible and palpable vein.

IMPORTANT: The chair for blood draws must be in the same room as the dental chair to minimize the risk of mixing tubes from different patients, as the blood will go back into the patient's body.

Once the workstation has been prepared (see chapter 2) and the patient is comfortably seated, place yourself on a mobile chair or stool and adjust its height to the arm to be punctured. This sitting position has a direct impact on the speed and efficiency of the procedure. Note that it is important for you and the patient to keep your legs together, as sitting directly in front of the patient with open legs may be experienced by the patient as uncomfortable or intrusive.



If the patient's right arm is being punctured, you should sit with both legs to the left of the patient's legs (Fig 1-3a); if the patient's left arm is being punctured, you should sit with both legs to the right of the patient's legs (Fig 1-3b). To position the outstretched arm, it is recommended to use either a padded cushion or a mobile, height-adjustable arm support (see chapter 4).