BOOK REVIEW

Ingo Pedal, M.D.

Review of the Wound Healing Process: Forensic Pathological Aspects


Among the most fundamental problems in forensic pathology are the distinguishing of intravital traumas from postmortem traumas and the estimation of wound age. The recent foudroyant pace of development in the fields of cellular biology, immunology, and molecular genetics has resulted in a multitude of new methodological approaches that make a reassessment of the state of knowledge imperative. The present anthology on every aspect of the wound healing process performs this service in exemplary fashion. The editors, a forensic pathologist (MO) and an immunologist (HK), are ideally suited to ensure a representative selection of international authors. The book comprises 21 chapters divided into five sections; most of the chapters offer a survey of individual topics, some constitute original articles in their own right. Each chapter includes an extensive list of references and many are supplemented by informative charts, tables and illustrations.

The first section deals with the clinical and pathological aspects of wound healing. The next and most comprehensive section is comprised of chapters on the role of humoral factors in the healing process, particularly cytokines but also cell adhesion molecules, proteases and protease-inhibitors. This section makes clear that while much promising, state-of-the-art research is taking place in this now difficult to grasp field of inflammation mediators, the manifold possibilities for applying the findings to practical questions of vitality and wound age are being but little used. The third section is composed of chapters dealing with cellular reactions. Among the topics dealt with here are trauma-induced epidermal proliferation (also in cadavers), electron microscopic studies on platelet activation, the complex role of mast cells in angiogenesis and wound healing, phagocytosis-induced changes in aging erythrocytes, and the time-dependent break-down of hemoglobin in macrophages. The fourth section contains two chapters on the occurrence of collagen and its subtypes in the course of wound healing. The last section of four chapters deals with the problems of discriminating intravital wounds from postmortem wounds and the estimation of wound age in legal medical practice.

This stimulating anthology is informative and up-to-date. Its extensive literature greatly enhances its worth as a source book. It can be recommended as a valuable reference tool for daily practice and basic research.

Professor, Institute of Forensic Medicine, Heidelberg, Germany.