

Preface

This book discusses Bone Grafting using autografts from non-vascularised grafts to pedicled ones and free vascularised bone grafts and the various options to bone grafting ie. the use of bone substitutes. The latter ranges from Allografts, Genomics in Orthopaedic Practice with particular reference to Bone Formation, Tissue Engineering including all 3 elements of the triad — Cells, Scaffolds and Signalling Molecules to Ceramics and Prostheses. The section of Ceramics include some results from the ten million ringgit Multi-Centre Research Project in Malaysia namely the fabrication of Malaysian Hydroxyapatite and the development of Malaysian Coral.

This book is useful to clinicians and clinician scientists in the field of Orthopaedics, Plastic and Reconstructive Surgery and Maxillo-Facial Surgery who are commonly presented with the clinical problem of reconstructing large bone defects. It is also useful to research scientists namely tissue engineers and biomedical engineers pursuing the field of research on bone substitutes in the field of allograft transplantation, genomics of bone, bone tissue engineering and the development of new generation bioceramics and new prostheses.

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