Contents

Section 1: Obstetrics

1. Protocol for Screening and Diagnosis of Fetal Down Syndrome in the First Trimester 3

Nirmala Chandrasekaran, Amarnath Bhide

- Screening Versus Diagnosis *4*
- Performance of Screening Tests *7*
- Contingent Screening *8*
- Diagnostic Procedures *8*
- Chromosomal Analysis *8*
- Special Circumstances *9*
- Future of the First Trimester Screening *10*
- Improving the Sensitivity and Reducing the False-positive Rates *11*

2. Screening for Gestational Diabetes 12

Sujata Misra

- Consequences: Why Bother to Screen? *12*
- Risk Stratification *12*
- Screening and Diagnosis *13*
- American Diabetes Association Procedure *13*
- WHO Procedure *14*
- Reconciliation Factors Between ADA and WHO *14*
- Significance of Cut-point of 2 hr Plasma Glucose Level of 140 mg/dl *15*
- Gestational Weeks at Which Screening is Recommended *16*

3. Contemporary Prediction and Prevention of Preterm Labor 23

Ameet Patki, Alok Sharma

- Prediction of Preterm Labor *24*
- Risk Markers *25*
- Risk Scoring *28*
- Genetics of Preterm Labor *32*
- Assessment of Risk during Pregnancy *32*
- Prevention of Preterm Labor *33*
- Antibiotics *35*

4. Sperm Molecular Factors in Recurrent Pregnancy Loss 41

Dipika Deka, Rima Dada

- Male Contribution Towards RPL *42*
- Advanced Age *42*
- Sperm Factors *43*
- Genetic Factors *50*

5. Bariatric Surgery in Women of Reproductive Age: Special Concerns for Pregnancy 54
Shrihari Dhorepatil, Bharati Dhorepatil
- Bariatric and Metabolic Surgery *55*
- Bariatric Surgical Procedures *56*
- Pregnancy and Weight Loss *63*
- Surgical Complications during Pregnancy *64*

6. Persistent Challenge of Intrapartum Fetal Heart Rate Monitoring 68
Vikram Sinai Talaulikar, Sabaratnam Arulkumaran
- Current Status of Intrapartum Fetal Monitoring and Associated Challenges *72*
- Future of Intrapartum Fetal Monitoring *86*

Section 2: Neonatology

7. Newborn Screening 97
Madhulika Kabra, Seema Kapoor
- Role of Obstetricians *98*
- Biochemical Technology Available to Detect Various Metabolic Inherited Disorders *99*

Section 3: Gynecology

8. Prevention and Early Detection of Cancer Cervix 105
Harshad Parasnis
- Human Papillomavirus (HPV) as Causative Factor *105*
- Natural Progression of Disease *106*
- Primary Prevention *106*
- Avoidance of HPV Infection *107*
- Secondary Prevention *109*
- Cervical Cancer Screening in Developed Countries *111*
- Cervical Cancer Screening in India *111*
- Screening in Rural India *113*

9. Pelvic Inflammatory Disease 116
Vatsla Dadhwal, Suneeta Mittal
- Alternative Parenteral Regimens *120*

10. Fertility Sparing Surgery in Gynecologic Malignancy 123
Sunesh Kumar
- Cervical Cancer *123*
- Stagewise Conservative Surgical Procedure for Cancer Cervix *124*

11. New Frontiers of Bone Formation: A Breakthrough in Postmenopausal Osteoporosis Management 138
Rajesh Malhotra, Ruchi Sehgal
- Bone Remodeling *138*
- Therapeutic Interventions for Osteoporosis *143*

12. Past, Present and Future of Robotic Surgery in Gynecology 156
Alka Kriplani, Amol Lunkad
- Robotic Surgery in Gynecology *159*
- Future of Robotic Surgery *163*

13. Ovarian Stimulation Protocols for IVF: What is the Evidence? 166
Anupama Bahadur, Neena Malhotra
- Overview of Superovulation Regimens *167*
- Agonist Protocols *168*
- Antagonist Protocols *174*
- Monitoring of the Cycle to Ovarian Response *176*
- Urinary Versus Recombinant Gonadotropins *179*

Section 4: Contraception

14. Recent Advances in Second Trimester Abortions: An Evidence-based Review 189
Kiran Kurtkoti
- Various Methods for Second Trimester MTP *189*
- Clinical Guidelines *193*

Index 197