

# Contents

|  |           |
|--|-----------|
| Foreword .....   | 5         |
| <b>1. Woman and maternity .....</b>  | <b>7</b>  |
| 1.1. I like it inside you .....  | 9         |
| 1.1.1. Factors with main influence on physiological foetal development .....                                   | 9         |
| 1.1.1.1. Protection .....  | 10        |
| 1.2. "Mum, I cling to you very strongly"<br>(connection between foetus and mother) .....                       | 14        |
| 1.3. Pathway inception to independence .....   | 15        |
| <b>2. I am here, I am looking at the world .....</b>   | <b>16</b> |
| 2.1. Stages of the neonatal age .....  | 17        |
| 2.2. Did I come at the right time?<br>(classification of newborns according to gestational age) .....          | 17        |
| 2.3. Am I lean, fat or am I OK?<br>(classification of newborns according to prenatal nutritional status) ..... | 17        |
| 2.4. Investigation of the newborn .....  | 19        |
| 2.4.1. Estimation of gestational age .....   | 19        |
| 2.4.2. The first investigation of the newborn .....  | 20        |
| 2.4.3. Investigation according to Apgar scoring system .....   | 21        |
| 2.5. What do I look like when they are looking at me<br>(surface anatomy of the newborn) .....                 | 22        |
| 2.5.1. I also hide a piece of anatomy in my body .....   | 23        |
| 2.5.1.1. Anatomical peculiarities on the skull .....   | 23        |
| 2.5.1.2. Anatomical peculiarities on the chest .....   | 24        |
| 2.6. The relationship between mother and child .....   | 25        |
| 2.7. When can the newborn be ill?<br>(clinical features of diseases during neonatal age) .....                 | 26        |
| 2.8. Adults look at me for something all the time<br>(screening investigation) .....                           | 27        |
| 2.8.1. Basic screening .....   | 29        |
| 2.8.2. Selective screening .....   | 31        |
| 2.9. I am in danger of life .....  | 32        |
| <b>3. I was born before the official date<br/>(preterm newborn) .....</b>                                      | <b>34</b> |
| 3.1. Care of the preterm newborn immediately after birth .....   | 35        |
| 3.1.1. Complications of prematurity .....  | 36        |
| 3.1.1.1. Neurological complications .....  | 38        |
| 3.1.1.2. Respiratory complications .....   | 42        |
| 3.1.1.3. Cardiac complications .....   | 57        |
| 3.1.1.4. Gastrointestinal complications .....  | 63        |
| 3.1.1.5. Eye complications .....   | 72        |

|   |            |
|---|------------|
| <b>4. Mature newborn .....</b>  | <b>74</b>  |
| 4.1. Now is the optimal time, I am going to visit the world<br>(term newborn) .....                                   | 74         |
| 4.2. I am a little bit lazy, I do not want to visit the world<br>(post-term newborn) .....                            | 75         |
| 4.3. I was a little bit suffocated. What will happen to me?<br>(asphyxiated newborn) .....                            | 76         |
| 4.4. I have problems with breathing .....   | 81         |
| <b>5. I have problems with my blood .....</b>   | <b>87</b>  |
| 5.1. I am very pale, because I am anaemic .....   | 87         |
| 5.2. I have a thick blood<br>(hyperviscosity syndrome) .....  | 88         |
| 5.3. Help me, I am bleeding, may be I am lacking something<br>(haemorrhagic disease of the newborn) .....             | 91         |
| <b>6. I am yellow, I want to sleep and I do not want to drink milk<br/>(differential diagnosis of jaundice) .....</b> | <b>94</b>  |
| 6.1. Unconjugated hyperbilirubinaemia .....   | 97         |
| 6.2. Conjugated hyperbilirubinaemia.....  | 102        |
| <b>7. Is my weight optimal? .....</b>   | <b>105</b> |
| 7.1. I am too small<br>(hypotrophic newborn) .....  | 105        |
| 7.2. I am very large<br>(hypertrophic newborn) .....  | 108        |
| 7.2.1. Newborn of a mother with diabetes mellitus .....   | 108        |
| <b>8. Infection in the newborn .....</b>  | <b>112</b> |
| <b>9. Birth trauma .....</b>  | <b>116</b> |
| <b>10. Neonatal abstinence syndrome<br/>(neonatal withdrawal syndrome) .....</b>                                      | <b>120</b> |
| <b>11. I am hungry<br/>(nutrition) .....</b>  | <b>123</b> |
| <b>12. I am different, something has changed my development and has<br/>harmed me .....</b>                           | <b>125</b> |
| 12.1. Congenital infection .....  | 125        |
| 12.2. Most frequent numerical chromosomal abnormalities .....   | 126        |
| <b>13. Principles and special treatment in the newborn .....</b>  | <b>131</b> |
| <b>14. Conclusion .....</b>   | <b>132</b> |
| ... a few final remarks .....   | 133        |
| <b>List of tables .....</b>   | <b>135</b> |
| <b>List of figures .....</b>  | <b>136</b> |
| <b>List of pictures .....</b>   | <b>137</b> |
| <b>Literature .....</b>   | <b>138</b> |