trauterine growth retardation, and stillbirths, as well as maternal disease aggravation (hypertensive and cerebrovascular complications). We present a case of NF-1 complicating pregnancy and a short review of the literature (Table 1).

Table 1. Review of literature concerning all NF-1 cases reported.6,8-14.

<table>
<thead>
<tr>
<th>Study</th>
<th>Study purpose</th>
<th>Sample Size</th>
<th>Maternal Manifestations</th>
<th>Maternal Complications</th>
<th>Fetal Complications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kalmantis et al</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>delivery of the second child at 40 weeks of gestation</td>
</tr>
</tbody>
</table>

- a malignant nerve sheath tumour grade III (not radically resected)
- photon radiotherapy
- tumour-free for 3 years
- 2nd pregnancy after ovulation induction
- a short episode of sudden-onset thoracic and abdominal pain (subsided spontaneously)
Neurofibromatosis-1 and Pregnancy

- in the postpartum period, severe abdominal pain recurred and became progressive (recurrent malignant schwannoma)
- the patient passed away 3 months after delivery.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Title</th>
<th>Year</th>
<th>Cases</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jain K, Sharma M, Mangal H</td>
<td>Neurofibromatosis in pregnancy: study of 2 cases. To report a patient who had multiple neurofibromas beginning in the 3rd month of her 1st pregnancy leading to a diagnosis of NF1.</td>
<td>2015</td>
<td>2</td>
<td>pallor, icterus, multiple big and small fibromas all over the body, numerous large and small neurofibromas all over the body with a big plexiform mass hanging out from right eye, generalized tonic-clonic seizure, icterus, meningioma, severe preterm delivery</td>
</tr>
<tr>
<td>Dahiya S, Mukherjee S, Premi HK.</td>
<td>Neurofibromatosis-1 and Pregnancy. International Journal of Advanced &amp; Integrated Medical Sciences, April-June 2016; 1(2):91-92</td>
<td>2016</td>
<td>1</td>
<td>skin lesions all over the body, vaginal bleeding, placenta praevia grade III, delivery by cesarean section, neurofibromatosis lesions on the newborn on the 3rd day of delivery</td>
</tr>
<tr>
<td>Xiong M, Gilchrest BA, Obayan OK.</td>
<td>Eruptive neurofibromas in pregnancy. JAAD, Volume 1, Issue 1, Pages 23–24</td>
<td>2015</td>
<td>1</td>
<td>dozens of new papules and nodules, progressively increasing in size and number, numerous 1- to 2-mm hyperpigmented freckles on the trunk, face, and axillae</td>
</tr>
</tbody>
</table>
Case presentation

A 36-year-old nulliparous pregnant woman affected by NF1 presented in the outpatient department of “Alexandra” Maternity Hospital, Athens. She had no previous family history of this disorder. On clinical examination, she had café-au-lait spots and multiple lesions of NF of variable sizes (cutaneous and subcutaneous), which – according to the patient – had been increasing in size and number (Figure 1). The latest magnetic resonance imaging exam (MRI) of the brain and spine was performed two months prior to current pregnancy and revealed demyelination lesions of the brain and arteriovenous malformation (AVM) of subarachnoid space of the cervical spine. On admission, the cardiovascular assessment did not reveal hypertension or any other cardiovascular disease and neither did the neurosurgical assessment. The patient underwent typical prenatal screening examinations. Genetic counselling was also offered to the couple regarding prenatal invasive procedures (chorionic villus sampling or amniocentesis). During pregnancy, no obstetric complications occurred apart from the diagnosis of placenta previa during the 18-23 weeks’ ultrasound scan. The pregnancy was uncomplicated until the 36th week of gestation when a caesarean section was performed due to spontaneous onset of labor and the presence of placenta previa. It was performed under general anesthesia because of the presence of spinal AVM. A healthy male neonate was born weighing 2650gr. The neonate was admitted in the Neonate Intensive Care Unit for 3 days. Both the post-operative period and the puerperium were uncomplicated. The neonate was not affected by NF I.

Discussion

Neurofibromatosis type 1 is one of the most common genetic disorders, caused by mutations of the NF-1 gene on chromosome 17. This condition can either be inherited, or occur de novo as a result of spontaneous mutations. The clinical manifestations of NF-1 range from mild cutaneous lesions and axillary freckling to plexiform neurofibromas, optic gliomas, bony abnormalities, pseudoarthrosis and malignancies. About two thirds of the affected population with NF-1 have parents with NF-1 and inherit the disease from one of them. The risk for each child is estimated to be about 50%. The remaining third of the population develops this condition due to spontaneous mutations. It seems that most of the NF-1 mutations reported so far are unique.