1. Adverse outcomes associated with multifetal pregnancies *(from: Stone J and Berkowitz RL, Seminars in Perinatology, volume 19: pp. 363-374, 1995):*

* Morbidity (major illness or disability) and mortality associated with multifetal pregnancies increase with increasing numbers of fetuses. Many adverse outcomes are the consequence of preterm birth:
* 11 percent of twins, more than one-third of all triplets, and more than two-thirds of all quadruplets and higher order multiples were delivered very preterm (<32 weeks of gestation), compared with less than 2 percent of singletons.
* Early mortality (death from 20 weeks of gestation through the first year of life) was 4.8 percent for twins, 8.6 percent for triplets, 10.8 percent for quadruplets, and 28.9 percent for quintuplets.
* The two most serious risks of multifetal pregnancies are: (1) loss of the pregnancy and (2) preterm birth, with its potential sequelae including perinatal mortality (i.e., death within the first week after birth), respiratory and gastrointestinal complications, infection and long-term neurologic impairment.
* Prevalence of cerebral palsy ranges from 1.6 to 2.3 per 1000 surviving infants in singletons, 7 to 12 per 1000 surviving infants in twins, and 28 to 45 per 1000 surviving infants in triplets.

1. Goals and clinical effects of multifetal pregnancy reduction:

* The goal of MPR is to reduce the risk of adverse outcomes in survivors of multifetal pregnancies by decreasing the number of fetuses *in utero*, since the risk of complications is proportional to the number of fetuses*.*
* Reducing pregnancies with three or more fetuses to a twin pregnancy results in fewer pregnancy losses, fewer preterm births and fewer postnatal infant deaths than in non-reduced pregnancies.
* See table below for summary of the effects of fetal reduction on decreasing the rate of spontaneous pregnancy loss *(from: Evans M, Andriole S and Britt D, Fetal Diagnosis and Therapy, volume 35:   
  pp. 69-82, 2014):*

|  |  |  |
| --- | --- | --- |
| **Type of Pregnancy** (starting # of fetuses) | **Spontaneous Pregnancy Loss Rates (%)** | |
| **Without fetal reduction** | **With fetal reduction** |
| **Quintuplet (5)** | 50 | 10 |
| **Quadruplet (4)** | 25 | 5.5 |
| **Triplet (3)** | 15 | 3.8 |