Objective: to evaluate the diagnostic roles and interrelation of the neurosonogram (NSG) and MRI for fetal central nervous system abnormalities.

Methods: 758 fetal cases with central nervous system abnormalities, who got NSG and MRI together, were analyzed retrospectively. The diagnoses of the cases, whose results of NSG were different from those of MRI, were compared with the diagnoses of newborns or the diagnoses of the multidisciplinary consultations.

Conclusions: There was a high level of consistency between NSG and MRI for fetal central nervous system abnormalities. NSG can achieve the correct diagnosis independently for most abnormalities. For the cases whose results of NSG and MRI were inconsistent, the two methods should be combined and analyzed together, since each one has its own advantages. It is wrong that the accuracy of MRI is believed to be better than that of NSG in any case.