Objective
To evaluate the outcome of twin pregnancies with evidence of primary or recurrent cytomegalovirus (CMV) infection during pregnancy.

Methods
A retrospective cohort study of 13 cases of twin pregnancies with evidence of intrauterine CMV infection detected by amniocentesis from both sacs after 21 weeks' gestation. CMV isolation was performed by culture on fibroblasts, shell vial technique and polymerase chain reaction (PCR) amplification of CMV DNA. After birth, the neonatal urine and saliva were cultured for CMV. Intrauterine CMV infection was defined as positive PCR at amniotic fluid analysis and congenital CMV infection was defined as positive CMV cultures after birth.

Results
All women underwent amniocentesis of both gestational sacs. Based on serologic tests, 12 women had evidence of primary CMV infection and one appeared to have recurrent infection. In 8 (61.5%) women, CMV was detected in both amniotic sacs whereas in 5 cases CMV was detected in only one sac. Sonographic findings indicative of fetal CMV disease were demonstrated in 6 cases (46.1%), both twins were affected in two of them. After counselling, five women opted to terminate the pregnancy whilst the other three underwent selective termination. Out of 9 live born neonates (6 pregnancies), 7 were found to have congenital CMV infection at birth, all of whom had dichorionic–diamniotic placentation (3 fused and 3 separated). All neonates were asymptomatic at birth except for one.

Conclusion
Even when both twins are infected, their clinical outcome might be completely different. The placenta type does not predict if one or both twins would be infected. Our data suggests that intrauterine transmission of the virus from one fetus to the other is possible.