Body: Newborns with congenital diaphragmatic hernia (CDH) suffer substantial morbidity and mortality. In non-randomised studies, fetal endoscopic tracheal occlusion (FETO) has improved survival, but is associated with an increased risk of premature delivery. Aims: To determine the mortality and morbidity of CDH infants who had undergone FETO and if this was adversely influenced by delivery prior to 35 weeks gestational age (GA). Methods: The outcome of all CDH infants born at King’s College Hospital who had undergone FETO during 2004 to 2009 were reviewed. Their lung to head ratios (LHR) pre and post FETO were recorded. Short-term outcomes included the duration of mechanical ventilation, use of high frequency oscillation (HFO) or inhaled nitric oxide therapy (iNO). Long term outcomes included: respiratory gastrointestinal, neurological, surgical and musculoskeletal problems. Results: Sixty one infants were born during the study period. The 33 infants who were born < 35 weeks GA had a lower LHR prior to delivery (p<0.001) and a lower change in LHR post FETO and prior to delivery (p<0.001); they also had a longer duration of ventilation (p<0.001). Amongst the infants born <35 weeks GA survival to discharge was lower (18% versus 82%, p<0.001) and a greater proportion required surgery for gastro-oesophageal reflux (50% versus 9%, p=0.011). Conclusion: CDH infants who have undergone FETO have greater mortality and morbidity if born < 35 weeks GA, emphasising the need to reduce premature delivery following FETO.