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**Infection rate after abdominal wall patch implantation in neonates
with congenital diaphragmatic hernia, risk factors and bacterial
spectrum**

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This doctoral thesis reports the infection rate and risk factors of abdominal wall patches in infants with a congenital diaphragmatic hernia (CDH) who underwent an abdominal wall plasty to enlarge the abdominal cavity. After stabilization with or without extracorporeal membrane oxygenation (ECMO), the herniated viscera were reduced from the thoracic cavity and the diaphragmatic defect was repaired with or without a patch during the initial surgery. In severely affected patients with a hypoplastic abdominal cavity and risk of abdominal compartment syndrome the layers of the abdominal wall muscle, and in some cases the skin, were replaced by a patch. So far, there is no published data available to verify the rate of infection and the risk factors associated with infection for these patients. Multiple surgeries may be necessary in patients with large CDH to minimize or even eliminate the risk of infection after an abdominal wall plasty. All neonates treated at the Department of pediatric surgery in the University Medical Centre Mannheim (UMM) who also had an abdominal wall patch implanted are included in this retrospective study (about 15%). We will analyze and identify risk-factors before, during and after surgery until the patch was removed, and recommend the adjustment of antibiotic therapy according to the common pathogens.