Introduction
Congenital abdominal wall defects generally manifest in 2 forms- gastroschisis and omphaloceles. Newborns with gastroschisis present a group of patients with missing abdominal wall which affects the intestines to a varying degree of insult during pregnancy. Omphaloceles on the other hand consist of defects where the Warton’s jelly still covers the viscera, however the disparity of the liver size to the abdominal cavity poses problems in management. A variety of degradable and non-degradable biomaterials have been used over the years to manage these defects: Goretex®, Dura patches, Surgisis®, Siliastic sheets, Vicryl sheets and Amnion membranes.

Materials and Methods
We present our experience with bovine pericard patches in the management of anterior wall defects during a 5 year period (1999-2003). Our investigations in 29 (100%) neonates managed for anterior abdominal wall defects are presented. Twenty-one (72%) neonates presented with gastroschisis and 8 (28%) neonates with giant omphaloceles. The male:female ratio was almost equal in gastroschisis (1:1) while a male predominance was observed in omphaloceles (6:1).

Results
A primary closure of the defect was possible in 5 (17%) cases and a single patch along with skin closure was achieved in a further 9 (31%) cases. In 15 (52%) neonates the defect was large and two patches were employed to sufficiently cover the defect. All patients (97%), except one (mortality due to extreme prematurity), were managed successfully. Depending upon the size of the defect and the metabolic condition of the neonate, the defect closure was completed after a mean of 85.7 days. Special protocols were created to manage the bovine pericard patches, which behaved differently to lyophilized dura patches previously used at our center. Integration of the patches was successful in 28 (97%) neonates; however, one neonate with gastroschisis presented significant challenges in the management.

Discussion and Conclusions
Bovine pericard patches are optimal biomaterials for the closure of anterior abdominal wall defects in gastroschisis and omphaloceles.

Disclosures
The authors have nothing to disclose.