ventingricular outflow tract obstruction is a recognised entity
dynamic RVOTO is not a possibility.
Finally, we must emphasise that although FTR and
functional mitral regurgitation (FMR) are both ventricular
diseases the response of the right ventricle to loading
conditions is not the same as that of the left ventricle.
Hence, strategies to tackle FMR cannot be applied per se to
manage FTR.

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Letter to the Editor

Indigenous decellularised jugular venous valve conduit
in truncus arteriosus repair

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We have reviewed the article ‘Jugular venous valve conduit (Contegra®) matches allograft performance in infant truncus arteriosus repair’ by Hickey et al. [1] published in the June 2008 issue of EJCTS with considerable interest. Traditionally, the allograft valve conduit is considered to be the ‘gold standard’ for RVOT reconstruction. This study suggests that the valved bovine jugular vein fares as well, if not better, than the allograft conduit, even for truncus arteriosus repair in infancy.

Facing the problem of non availability of homografts in the
appropriate sizes, and the prohibitive high cost of the Contegra® graft, as well as for commercially available homograft conduits, we instituted the use of an indigenously developed decellularised valved bovine jugular vein conduit, processed in our own research facility to establish RV to PA continuity in the surgical repair of various congenital heart
diseases (a total of 83 patients: decellularised porcine pulmonary artery in 43 and decellularised bovine jugular vein in 40), after ethical committee clearance for clinical application.

Between May 2004 and April 2008, 10 infants underwent surgical repair of truncus arteriosus employing indigenously processed valved bovine jugular vein conduit of sizes 11—16 mm (median 13 mm) for RVOT reconstruction. The mean age of these patients was 2.05 months (range 15 days to 7 months) and the mean weight was 3.6 kg (range 2.5—4.5 kg). The mean z-score of the decellularised BJV conduit was 3.33 (range 1.33—4.46). One patient
died on the 4th postoperative day due to low cardiac output.

The patients have been followed up at varying periods
from May 2004 to May 2008. Conduit replacement was
required in one patient 6 months following surgery due to
dilatation of the bovine jugular vein conduit with severe
regurgitation. The problem of early dilatation of conduit has
been managed by wrapping the conduit with a piece of
decellularised bovine pericardium. We are also working on
collagen coating of the conduit before implantation to
provide strength and prevent dilatation.

The major advantages of decellularised bovine jugular
vein conduits in our experience are:

1. lack of conduit calcification
2. trivial to mild conduit valve regurgitation during follow-
    up
3. no stenosis in either the conduit or site of anastomosis

Based on this early, limited experience with compara-
tively short follow-up, we believe that decellularised bovine
jugular vein conduits are safe to use, have good handling
characteristics, and have performed well in early follow-up.
These conduits are especially relevant for the developing
nations due to their easy availability in different sizes and
lower cost, costing half as much as the commercially
available conduits.

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Jugular venous valve conduit (Contegra®) matches allograft performance

* The authors of the original paper [1] were invited to reply to this Letter to
the Editor but their reply was not received.
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