In the current era, approximately 50% of heart transplant (HTx) recipients survive more than 13 years, with an increasing population of patients surviving beyond 20 years. Previous studies have suggested that HTx recipients are at particularly high risk of developing de novo malignancies due to more intensive immunosuppression. The perception of higher risk for post-transplant lymphoproliferative disease (PTLD; e.g. lymphoma) associated with OKT3 led to a fall in the use of OKT3 during the 1990s. Main advances in post-HTx management with probable reduction of risk for neoplasia are introduction of (1) antiviral prophylaxis, (2) induction agents that are more specific in their actions and (3) the mammalian target-of-rapamycin inhibitors (mTORs).

Reported incidence of post-transplant malignancy in HTx recipients ranged from 2.3% to 27% and skin malignancies represented up to 50% of post-transplant malignancies. The second most common cancer in HTx recipients was PTLD. A retrospective analysis included 17,587 adult HTx recipients who were followed for up to five years post-operation. The incidence of de novo malignancy was 10.7% one to five years after transplantation, with higher prevalence in the contemporary era.

Considering the increased burden of de novo malignancy in HTx recipients, additional effort needs to be directed towards formulating evidence-based cancer screening recommendations and optimised immunosuppression protocols for these patients. It may be reasonable to consider the risk of de novo post transplant malignancy in older patients when making decisions regarding candidacy for HTx versus left ventricular assist device as destination.

REFERENCES

To improve our understanding of mechanisms related to VAD therapy, investigators have reviewed data from LVAD patients with pre-operatively placed implantable pulmonary artery pressure (PAP) monitors (CardioMEMSTM). Studies have shown that implantation of PAP monitors can assist in management of haemodynamics, thus potentially reducing hospitalisation in a portion of LVAD patients with volume overload. Although retrospective analyses of PAP monitor data suggested that PAP could be effectively reduced by LVAD implantation, there remains a lack of prospective data to support routine use of PAP monitoring in LVAD patients to guide haemodynamic management. In the ongoing Intellect2, a multi-centre prospective observational 6-month follow-up study of 100 LVAD patients (https://clinicaltrials.gov/ct2/show/NCT03247829), CardioMEMS will be evaluated for its effects on haemodynamics optimisation to impact on patients’ functional status, quality of life and hospital medications.

REFERENCES
should we be using digoxin in 2018?

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Digoxin is often used in the management of patients with heart failure (HF) with or without atrial fibrillation (AF). There is sound biological rationale for the use of digoxin, but the data on clinical outcomes with digoxin use in this patient population are conflicting. There is a single adequately powered randomised trial of digoxin in patients with HF in sinus rhythm. This trial showed a small but significant reduction in the rate of hospitalisation due to HF with the use of digoxin, when compared to placebo, among patients treated with ACE inhibitors and diuretics. There was no effect on mortality. On the contrary, there are numerous secondary analyses of observational data from randomised trials which suggest that there may be an increased risk of death from using digoxin, both in patients with HF, those in AF, or both. However, observational data on digoxin use suffer from treatment bias (confounding by indication), as the sickest patients are the ones who are prescribed digoxin. Propensity matched analyses have been attempted to overcome the effect of this bias with conflicting results. However, it is likely that because the magnitude of this bias is large, no amount of statistical adjustment can yield reliable effect estimates. This highlights the need for large, randomised trials of digoxin.

REFERENCES