Supply Of Bone Allografts By University Malaya Medical Centre (UMMC) Bone Bank: Past And Present

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INTRODUCTION
Establishment of a bone bank in UMMC is essential to provide bone allografts for orthopaedic surgeons. Femoral head was the highest bone allograft (45%) being supplied for transplants during 2009-2013. Having quality system in place since 2014, the bank started to receive more cadaveric bones from National Transplant Resource Centre (NTRC) besides increasing number of procured bones from living donors. Bones procured and supplied during 2014-2017 was reviewed to see the sustainability of the bank in providing various bone allografts for transplantations throughout Malaysia.

METHODS
Data on bones procured and processed into bone allografts during the period of 2014-2017 were compiled and analyzed. The bones were procured from living and cadaveric donors. Bones were kept deep frozen, gamma sterilized and stored at -80°C until despatch for transplantations. The data were compared to those during 2009-2013.

RESULTS
Table 1: Bones procured, grafts produced and supplied by UMMC Bone Bank

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<th>2009-2013</th>
<th>2014-2017</th>
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<tbody>
<tr>
<td>Procured bones</td>
<td>122</td>
<td>449</td>
</tr>
<tr>
<td>Bone allografts</td>
<td>108</td>
<td>285</td>
</tr>
<tr>
<td>Bones supplied</td>
<td>31</td>
<td>209</td>
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DISCUSSION
Bones procured and bone allografts produced increased by 3.6 and 2.6 times respectively during 2014-2017 as compared to 2009-2013 (Table 1). Bone allografts supplied for transplantations increased tremendously by 6.7 times indicating the bank is capable to supply more grafts following bone donation campaigns. Femoral head is still the most supplied graft from 45% (2009-2013) to 88% (2014-2017) (Figure 1). The Bank managed to supply various types of bone allografts for transplantations. Surgeons need to be informed about the availability of the allografts through awareness programmes.

CONCLUSION
Continuous tissue donation programme is essential to ensure sustainable supply of bone allografts for transplantations.

REFERENCES