

NHS ENGLAND SPECIALISED SERVICES

CLINICAL PANEL REPORT

Date: 17 April 2019. Agenda item 6.4
Intervention: Stem cell transplant
Indication: Sickle cell disease
ID: 1830
Gateway: Policy Gateway 2 Third Assessment
Programme: Blood & Infection
CRG: BMT

Information provided to the panel

Evidence review completed by Solutions for Public Health November 2018
Revised clinical commissioning policy proposition
Draft CPAG summary report

Key elements discussed

The policy proposition first came to the Clinical Panel in December 2018. At that point it was determined that the evidence base was limited. The evidence was complicated by the different HSCT interventions used including sibling, matched, and allogenic transplants. The outcomes were worse when using transplants that are not sibling matched. None of the studies included any *comparators* receiving other treatments. In view that sickle cell disease is a chronic long-term condition the panel did not consider that the evidence presented a case for net benefit. There are significant harms of the treatment including mortality and GvHD. At this point the panel concluded that HSCT is a feasible treatment but the lack of evidence of net benefit in comparison to medical management and the high risk of the procedure meant that as written it was not suitable for routine commissioning.

The policy proposition returned as a not for routine commissioning position in February 2019. It was identified on discussion that the policy could be amended to be a treatment consideration for matched sibling donors only.

The policy proposition now returns revised to recommend treatment for those with severe sickle cell disease with a related donor that is fully HLA matched to the recipient (sibling). The panel reconsidered the evidence that HLA matched sibling HSCT is associated with outcomes that are supportive of routine access to treatment. It was reported that 20% of patients will have an HLA matched sibling donor.

For the haploidentical HSCT there are higher rates of rejection, and once rejected the patient continues to have sickle cell disease.

Recommendation

The panel supports the policy proposition moving forward for routine commissioning with the intervention restricted to fully HLA matched sibling donor.

The panel recommends that stem cell transplant for sickle cell disease for other donor types remains experimental, an improved evidence base would need to be developed before reconsideration.

Why the panel made these recommendations

Stem cell transplant is a treatment of known complex and serious risks. There is a lack of good quality research to determine the benefit of the treatment over standard medical care for adult sickle cell disease. All studies in the evidence review had a follow up of less than 5 years. One retrospective study demonstrated that the total graft failure rates in HLA-identical donors were 12% vs 47% for haploidentical donors. It was a small study with no analysis of statistical significance.

Despite the very limited evidence the Panel accepted the proposal could proceed provided there was close national monitoring and reporting of the outcomes in the sibling donor subgroup.

Documentation amendments required

Changes are needed to Section 8 of the policy proposition. Section B can be removed and replaced with a statement at the start of Section 8 that states all donors must be fully HLA matched to the recipient (sibling). In the 8A list it needs to be made clear which of the criteria must be applied placing either the words 'any of the following apply' or placing AND or OR at the end of each line. In the fitness to proceed section the words 'the patient should have all of the following'.

Declarations of Interest of Panel Members: None

Panel Chair: James Palmer, Medical Director