Statutory Approvals Committee – minutes

Centre 0102 (Guys Hospital)

Pre-implantation Genetic Diagnosis (PGD) application for Epidermolysis Bullosa Simplex with Muscular Dystrophy (EBS-MD), OMIM #226670

Thursday, 25 June 2020

HFEA, 10 Spring Gardens, London, SW1A 2BU via Teleconference

Committee members	Margaret Gilmore (Chair) Emma Cave Anne Lampe Ruth Wilde	
Members of the Executive	Moya Berry Catherine Burwood	Committee Officer Licensing Manager
Specialist Adviser	Professor Mary Porteous	
Legal Adviser	Ros Foster	Browne Jacobson - LLP

Declarations of interest:

- Members of the committee declared that they had no conflicts of interest in relation to this item.

Apologies:

- Apologies were received from Tony Rutherford.

The committee had before it:

- 9th edition of the HFEA Code of Practice.
- Standard licensing and approvals pack for committee members.

The following papers were considered by the committee:

- Executive Summary
- PGD Application Form
- Redacted Peer Review
- Genetic Alliance Statement
- Forms of epidermolysis bullosa and of muscular dystrophy already approved for PGD:
  - 2019-12-12 SAC minutes- Epidermolysis bullosa, junctional with pyloric stenosis or pyloric atresia, OMIM #226730 (also one other type – OMIM #612138)

- 2018-01-25 SAC minutes- Muscular dystrophy, congenital LMNA related, OMIM #613205, and multiple other types
- 2017-05-25 SAC minutes- Merosin deficient congenital muscular dystrophy type 1A, OMIM #607855.
- 2015-07-30 SAC minutes- muscular dystrophy–dystroglycanopathy (MDD) types A1-A8 and A10-A14, OMIM #236670 #613150 #253280 #253800 #613153 #613154 #614643 #614830 #615041 #615181 #615249 #615287 #615350.
- 2015-04-30 SAC minutes- Epidermolysis bullosa, lethal acantholytic, OMIM #609638.
- 2014-12-11 SAC minutes- Non-Herlitz Junctional Epidermolysis Bullosa, OMIM #226650.

1. Consideration of application

1.1. The committee welcomed the advice of its specialist adviser, Professor Mary Porteous, who confirmed that the condition was as described in the papers.

1.2. The committee noted that the description in the PGD application for Epidermolysis bullosa simplex with muscular dystrophy (EBS-MD), OMIM #226670, is consistent with the peer review.

1.3. The committee noted that the condition being applied for is not on the list of approved PGD conditions.

1.4. The committee noted that the Genetic Alliance UK statement provided a perspective on the impact of the condition on patients, their families and carers.

1.5. The committee had regard to its decision tree. The committee noted that the centre is licensed to carry out PGD. The committee was also satisfied that the centre has experience of carrying out PGD and that generic patient information about its PGD programme and associated consent forms had previously been received by the HFEA.

1.6. The committee noted that the proposed purpose of testing the embryos was as set out in paragraph 1ZA(1)(b) of Schedule 2 of the Act, i.e. 'where there is a particular risk that the embryo may have any gene, chromosome or mitochondrion abnormality, establishing whether it has that abnormality or any other gene, chromosome or mitochondrion abnormality'.

1.7. The committee noted that Epidermolysis bullosa simplex with muscular dystrophy (EBS-MD), OMIM #226670, is inherited in an autosomal recessive manner, which means there is a 25% chance of an embryo being affected by the condition in each pregnancy if each parent has a relevant mutation.

1.8. The committee noted that the penetrance of the condition is 100%.

1.9. Epidermolysis bullosa simplex with muscular dystrophy (EBS-MD), OMIM #226670, is characterised by skin blistering, blistering of oral mucosa, skin scarring, and muscular atrophy. The condition is painful, significantly affects the quality of life and can cause early death.

1.10. There is no cure for this condition and treatment focuses on managing the symptoms of individual patients.

1.11. The committee noted the executive's request to consider Epidermolysis bullosa simplex with muscular dystrophy (EBS-MD), OMIM #226670, for inclusion on the list of conditions approved for PGD. The committee agreed to consider the application on this basis.

1.12. The committee noted the recommendation of the peer reviewer to consider one other type of muscular dystrophy condition for inclusion on the list for which PGD can be applied. This condition is Muscular dystrophy, limb-girdle, autosomal recessive 17, OMIM #613723. The condition runs a similar course to the muscle disease in epidermolysis bullosa simplex -

muscular dystrophy, has the same pattern of inheritance and is characterised by early childhood onset of proximal muscle weakness.

2. Decision

2.1. The committee considered that, in the worst-case scenario, Epidermolysis bullosa simplex with muscular dystrophy (EBS-MD), OMIM #226670, is a rare, severely painful, and life-limiting condition with symptoms present at birth. The condition is characterised by skin blistering, blistering of oral mucosa, skin scarring, and muscular dystrophy. The condition is painful, significantly affects the quality of life and can cause early death. There is no cure or mitigating treatments for the condition. The committee considered the potentially devastating physical and psychological impact on the quality of life of those affected with the condition.

2.2. The committee considered that in the worst-case scenario, Muscular dystrophy, limb-girdle, autosomal recessive 17, OMIM #613723, is of a similar muscle weakness presentation to Epidermolysis bullosa simplex with muscular dystrophy (EBS-MD). The condition can present in early childhood and may result in serious disability in those affected.

2.3. The committee had regard to its explanatory note and confirmed that, on the basis of the information presented, it was satisfied that there is a particular risk that an embryo may have the abnormalities in question and that there is a significant risk that a person with such an abnormality will, given the condition's worst symptoms, have or develop a serious physical disability, a serious illness or any other serious medical condition.

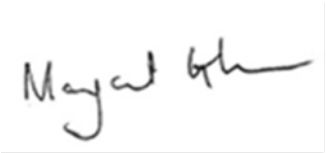
2.4. The committee was therefore satisfied that the following conditions meet the criteria for testing under paragraph 1ZA(1)(b) and (2) of Schedule 2 of the Act. The committee agreed to authorise testing for:

- Epidermolysis bullosa simplex with muscular dystrophy (EBS-MD), OMIM #226670
- Muscular dystrophy, limb-girdle, autosomal recessive 17, OMIM #613723

3. Chairs signature

3.1. I confirm this is a true and accurate record of the meeting.

Signature



Name
Margaret Gilmore

Date
23 July 2020