UKCGG-National Cancer Genetics MDT meeting, 17th December 2020
Mixed Cases

Thank you to all who attended the mixed case session on December 17th. Cases were presented from St Georges, RMH, Birmingham and Cambridge. Here is a brief summary of the cases (minimising patient information) and relevant papers.

Katie Snape presented two cases; the first with multiple BCC and a variant classified as likely pathogenic in *PTCH1 (c.3062A>G_p. Tyr1021Cys).* Family members do not have any other features of Gorlin syndrome (including no macrocephaly). Katie is particularly interested to know if any other centres have patients with *PTCH1* variants who have a BCC phenotype only. Please contact her on k.snape@nhs.net

The second case presented was a patient with a *BRCA2* pathogenic variant and multiple primary cancers with no syndromic features. Chromosome breakage studies normal, no other *BRCA2* variants identified on additional interrogation of NGS data. Group agreed that this is unlikely to be Fanconi anaemia and recommended IHC studies and a full cancer panel.

Marc Tischkowitz presented a patient with cataracts, greying hair, "hole in heart", muscle wasting hypothyroidism, diabetes, prolactinoma and hyopogonadism. Variants in *WRN* and *PRKAR1A* identified in 100k. Group agreed not typical for Carney syndrome. A suggestion of *MAFA* was made which can link cataracts and diabetes, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5798333/

Andrea Forman presented a paper outlining a scoring system for when we should undertake germline MMR testing in patients with sebaceous neoplasms and highlighted the low clinical utility of MMR-IHC testing for this tumour. We have adopted this scoring system at St Georges and other centres (Nottingham and Glasgow) commented that they are already using this. Fiona Lalloo will organise collection of data from centres to look at MMR mutation detection in a UK cohort of patients. https://www.nature.com/articles/gim201419

Kai-Ren Ong presented a patient with multiple primaries and variants in *TP53* and *FLCN*. Discussed that *TP53* surveillance as per UK CGG guideline is not variant specific. Also highlighted that test directory criteria now recommend a full colorectal panel in patient with colorectal cancer diagnosed below 30 (Criteria R209)
https://jmg.bmj.com/content/early/2020/06/22/jmedgenet-2020-106876

Terri McVeigh presented a patient with a cancer of unknown primary (mCUP) with a somatic *EXSR1-AFF1* fusion. *EWSR1-AFT1* fusions have been identified in diverse range of neoplasms including Ewing's Sarcoma, Conventional clear cell sarcoma and clear cell sarcoma-like tumour of the GI tract https://pubmed.ncbi.nlm.nih.gov/22510762/

Helen Hanson presented a case of prenatal diagnosis of CMMRD and highlighted the non-neoplastic features of CMMRD and associated MRI brain abnormalities
https://jmg.bmj.com/content/51/6/355.long

http://www.ajnr.org/content/39/10/1943

Date of next meetings:
February 11th 12.30-13.45 Clinical decisions with variant reclassification
March 18th 12.30-13.45 CanRisk – Antonis Antoniou overview and CanRisk cases
Please send any questions or ideas for future meetings to Helen Hanson helen.hanson6@nhs.net

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