Reviewer's report

Title: Bronchial isomerism in a Kabuki syndrome patient with a novel mutation in MLL2 gene

Version: 1 Date: 9 July 2013

Reviewer: Margaret Adam

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Minor Essential Revisions
1. It would be helpful for the authors to be consistent about using certain terms, such as always using "persistent fetal fingertip pads" instead of sometimes using "persistent fetal pads"; clarifying that the eversion of the lateral third of the eyelid only applies to the lower eyelid; and ensuring that gene names are always italicized.
2. In the first paragraph of the Background section, 5th line, the term "hypodonia" should be "hypotonia".
3. In the clinical report, first paragraph, line 8 "trough" should be "through".
4. In the clinical report, second paragraph, line 5 the authors state that the physical examination revealed "dystrophia". What is this?
5. In the Cytogenetic analysis section, second paragraph, line 7 a period is missing at the end of the sentence "...conferred by SET domain."
6. The authors state definitively that the mutation in their patient "...strongly affects the physiological function of MLL2...". This sentence should be qualified (unless the authors performed functional studies) by stating that the mutation "would be predicted to affect...".
6. The authors state that he MLL2 mutation cases a truncated protein to be produced. However, the other possibility is that no protein product is made due to nonsense-mediated decay. This should be acknowledged.
7. The authors need to clarify their conclusion about when to investigate for defects of lung lateralization in individuals with Kabuki syndrome. Should it be done in all individuals with this diagnosis, even if specific symptoms are not present? Should it be done in all those with predicted loss of function mutations in MLL2? Should it be done in all affected individuals with recurrent pulmonary symptoms, regardless of whether there is evidence of immunologic dysfunction? Or should it be specifically investigated only if there are recurrent pulmonary symptoms without known immunologic dysfunction?
8. The lip pits referenced in the legend to Figure 1 cannot be seen easily in the photographs of the patient. Could arrows be used to highlight them?

Discretionary Revisions
1. It would be helpful for the authors to clarify whether the genitourinary
malformations in their patient consisted solely of unilateral cryptorchidism in a newborn/one month old. Was this persistent and did it need surgical correction? This finding can be seen in a subset of normal males, particularly in early infancy.

2. The authors discuss the hypoglycemia found after birth. How low was the blood glucose level? What interventions were needed and how quickly did it resolve?

3. The authors give no further growth parameters for their patient, aside from the growth parameters at birth. It would helpful to know the growth parameters at older ages, particularly the head circumference, as the authors continue to reference microcephaly as a finding in their patient.

3. The authors state that left isomerism can be associated with abdominal abnormalities, including asplenia and polysplenia. They then state that an abdominal ultrasound in their patient was normal. It would be helpful to state more specifically if the spleen appeared normal on this imaging study.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that i have no competing interests.