Reviewer's report

Title: 3-D reconstruction of a human foetus with combined holoprosencephaly and synophthalmia

Version: 1 Date: 20 March 2009

Reviewer: Gabriele Tonni

Reviewer's report:

Comments to Authors

Title: I would suggest the following: “The role of CAD (computer aided design) in three-dimensional reconstruction of a fetus with combined holoprosencephaly and synophthalmia”

Abstract: Keywords are missing. Please, provide at least three to five keywords.

Background: I would suggest to reduce aetiology of HPE and to better specify the aim of the study. Please, provide additional information about previous use of 3D CAD (if any) in this subject area and/or the role of 3D CAD in aiding necropsy and/or post-natal diagnosis of congenital anomalies.

Methods: Fetal karyotype was not provided. Considering that this is not per se an issue about prenatal diagnosis, the lack of this information is not vital. However, karyotype should have been obtained by Obstetricians or Pathologists at post-mortem from skin fibroblast culture, thymus or surrenal gland.

Results: Results section is well written and organized and supported by appropriate figures and figures captions.

Discussion: As previously suggested in Background section, I would rather focus on the usefulness of the 3D CAD technique in the current issue and discuss potentials and possible further applications. To increase the impact of the current study, comparison between CAD results and necropsy should be delivered.

This would give more detailed informations both to clinicians and/or pathologists about the role of 3D CAD and its potential application in order to enhance diagnostic accuracy.

The “time” taken to perform such technique and relative costs should be reported, if possible.

Sincerely,

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Level of interest: An article of outstanding merit and interest in its field

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.