Author's response to reviews

Title: SIDS Pathogenesis. A review of hypotheses: Plausibility and evidence

Authors:

Paul N Goldwater (paul.goldwater@health.sa.gov.au)

Version: 5 Date: 14 February 2011

Author's response to reviews: see over
Dear Editors,


New title: A perspective on SIDS pathogenesis. The hypotheses: plausibility and evidence

I thank the reviewers for their helpful comments. I respond as follows:

I agree that my paper is more an opinion or perspective, hence I have changed the title to “A perspective on SIDS pathogenesis. The hypotheses: plausibility and evidence”

Addressing the Reviewers comments:

Reviewer 1: I am grateful to Reviewer 1 for his supportive comment. Because the reviewer did not include a reference for his position in regard to the argument over ALTE and SIDS, I would prefer to leave my manuscript unchanged because this area remains open and I have provided up to date reference here.

Reviewer 2: I am grateful to Reviewer 2 for his helpful comment. I have changed the title to indicate the paper is a “perspective” and modified my wording accordingly (re: his comment i) and v). I would prefer to keep the references to my group in the third person as first person would seem inappropriate for such an article.

The changes are as follows:

Abstract line 6: deleted “review” and inserted “perspective” (highlighted)
Abstract line 14: deleted “review” and inserted “paper” (highlighted)

Discussion Page 5 line 2: deleted “review” and inserted “examine” (highlighted)
Discussion Page 5 lines 12-15: Inserted sentence (highlighted) to clarify reasoning behind “single cause” approach rather that the reviewer’s “myriad of possible causes” (his comment ii and comment iv).
Discussion line Page 5 line 20: deleted “review” and inserted “paper” (highlighted)
Discussion line Page 6 line 11: removed the word “disingenuous” new wording (highlighted)
Discussion line Page 6 lines 28-29: softened wording (highlighted)
Discussion line Page 7 lines 41: changed “remain obstinate in regard to” to “continue to support” (highlighted)
Discussion line Page 9 lines 45: changed “contradictory and disingenuous” to “questionable” (highlighted)

Conclusion & final analysis Page 14 line 26: Reviewer point vii) Changed “Table 3” to “Table 2” (highlighted) (explaining why Reviewer 2 could not find Table 3!)

Reviewer 2 point ii): Please see above in regard to “myriad causes.” I think it is time to reconsider the pathological findings as helping to more accurately “define” SIDS. My argument goes some was toward this idea particularly in regard to intrathoracic
petechiae and organ weights. A diagnosis of exclusion is unhelpful in terms of understanding pathogenesis of SIDS. I am suggesting that if we paid more attention to the salient findings we would be much better off in understanding SIDS. I hope I have opened a door for researchers to pursue this almost oft neglected area of SIDS investigation.

**Reviewer 2 point iii):** I think Reviewer 2 has misunderstood my thesis. Researching a particular risk factor should be backed up with reasonable and plausible physiological and pathological and epidemiological connections. My paper does not indicate babies are required to possess major risk factors but asks that research should ensure congruity and plausibility with epidemiology/risks and pathology. Sleeping prone increases the risk, however, as the reviewer states, most cases now occur in supine babies indicating that proneness is not a “requirement” for SIDS. What are the “requirements?”...a genetically and immunologically susceptible baby who has been disadvantaged by preterm events (possibly resulting in brainstem and/or cardiac and/or immune system changes) who acquires an infection at a critical time. The risk factors seem to pertain to acquisition of infection (season, immune status, etc.) and responses to infection. I am not aware that I have mixed up “association with causation.” But my view of a “single cause” is supported by my arguments. Diverse risk factors would appear to influence outcomes. Because males have a higher risk of SIDS doesn’t mean females don’t succumb to it. But you can be almost certain that the deceased baby boys and girls will exhibit very similar pathology at autopsy. My gripe is that too few epidemiological papers have bothered to attempt even a look at the pathology let alone attempt to examine whether or not there is a correlation.

**Reviewer 2 comment vi):** I regret the “prone sleep position” example was ill-judged. I have replaced the sentence “focused on usually a single phenomenon (such as prone sleep position) and which has been undertaken at considerable expense to the public purse.” with “focused on usually a single mechanism (such as respiratory obstruction) and which has been undertaken at considerable expense to the public purse.”