



Prenatal Risk Factors for Neurogenic Bladder-Some Concerns!

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Dear Editor,

We read with much interest the article by Yousefichaijan et al., published online in your journal (1), yet at the same time we would like to make the following comments, clarification of which would benefit the general readers of the journal.

First, the authors studied a sample of 60 children, in the study group and control group, yet the basis of this sample size calculation was not provided. This is of importance as the power of the study is dependent on the sample size (2).

Second, the authors tried to assess the prenatal risk factors of neurogenic bladder by comparing the prevalence of risk factors in cases and controls. However, the very premise of such a comparison is that the two groups (cases and controls) are similar in characteristics, other than those assessed. There is no mention of any kind of 'matching' of cases and controls. They could have at least presented the baseline demographic (age, gender, etc.) and anthropometric data of these two groups to indicate whether they were comparable or not.

Third, the study was "population-based" yet from the methodology, it is very clear that both the cases and controls were recruited from a single hospital (Amir Kabir Hospital) rather than from the community. Therefore, it was actually a hospital-based study.

Fourth, it is not clear how the diagnosis of 'neurogenic bladder was made in the cases because it was only mentioned that "all infants with repeated urinary tract infections (UTI), frequent urination, and symptoms of urinary retention and obstructive bladder were enrolled" and that only "a sonogram of the bladder was performed to evaluate bladder anatomy". A comprehensive diagnosis of neurogenic bladder would require fluoroscopy, nuclear medicine studies or urodynamic testing (3). This makes one wonder whether these children really had neurogenic bladder or were merely cases of dysfunctional voiding.

Fifth, in the exclusion criteria it was mentioned that

those "who suffered from extensive comorbidities or were unavailable for the follow-up, confounded the study results of the treatment; thus, they were excluded from the sample of the study". It is not clear what the author meant by "extensive comorbidities" and also the study neither had any follow up nor any treatment, thus, what remains to be answered is how "unavailability" for follow up would have "confounded the study results of the treatment".

Sixth, the methods mention that the authors "used logistic regression analysis to measure the relationship between prenatal risk factors and neurogenic bladder" yet the results present only simple univariate analysis of risk factors between the cases and controls and no logistic regression was used.

Seventh, the authors did not mention the definitions/criteria used for terminologies, such as "urban or rural areas", "smoke exposure", "prenatal care (inadequate or adequate)" or "type of infant feeding". It is important to compare results across different studies.

Moreover, the methods erroneously mentioned the patients with neurogenic bladder as the control group rather than the cases.

Footnote

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References

1. Yousefichaijan P, Madandar E, Rafiei M. Prenatal risk factors for neurogenic bladder. *Journal of Compr Pediatr*. 2017;**8**(2):e58485. doi: [10.5812/compreped.58485](https://doi.org/10.5812/compreped.58485).
2. Jones SR, Carley S, Harrison M. An introduction to power and sample size estimation. *Emerg Med J*. 2003;**20**(5):453-8. [PubMed: [12954688](https://pubmed.ncbi.nlm.nih.gov/12954688/)]. [PubMed Central: [PMC1726174](https://pubmed.ncbi.nlm.nih.gov/PMC1726174/)].
3. Sturm RM, Cheng EY. The management of the pediatric neurogenic bladder. *Curr Bladder Dysfunct Rep*. 2016;**11**:225-33. doi: [10.1007/s11884-016-0371-6](https://doi.org/10.1007/s11884-016-0371-6). [PubMed: [27610207](https://pubmed.ncbi.nlm.nih.gov/27610207/)]. [PubMed Central: [PMC4992015](https://pubmed.ncbi.nlm.nih.gov/PMC4992015/)].