

## PREVENTION AND TREATMENT OF POSTPARTUM URINARY RETENTION: RECOMMENDATIONS BASED ON EVIDENCE AND IN THE CONSENSUS OF BRAZILIAN EXPERTS

### Hypothesis / aims of study

This is the first study on the management of postpartum urinary retention (PUR), based on evidence and consensus of experts. PUR is defined as the absence of spontaneous urination six hours after vaginal delivery or after removal of the bladder catheter. It can be 'overt' or 'covert'. It is persistent, when it extends for more than three days after giving birth(1). Therefore, the objective of this study was to establish consensus among specialists about clinical recommendations, based on evidence, to prevent and treat PUR.

### Study design, materials and methods

A descriptive-exploratory study developed through the Delphi Technique for the purpose of forming consensus among experts on recommendations, based on evidence. Prior to the consensus-building phase, publications on PUR management from two search strategies were selected and analyzed, these publications having been authored by two independent researchers, and the selection of these publications was finished in January 2016. The first search was carried out in six databases: EMBASE, MEDLINE (PubMed), Scopus, Cinahl, LILACS, SciELO and DARE. The second search was carried out through Google Scholar. Data collection for consensus formation occurred from November 2016 to January 2017. Four instruments were used to collect data, one of them for characterization of the sample. For the consensus formation three rounds of the Delphi panel were performed. In the first round, the pre-intervention instrument, composed of structured questions, based on the recommendations, was sent. In the second round, intervention instrument 1 was sent, composed of the issues structured and reviewed by the experts in the first round, plus the links to the evidence that provided the basis for the recommendations. In the third round, the intervention instrument 2, composed of the questions structured and reviewed by the experts in the previous round, the percentage of agreement of each recommendation and the opinions of the specialists, was sent. A Likert scale with scores from 1 (fully disagree) to 5 (I fully agree) was used to check agreement with each recommendation. There was an open question at the end of each recommendation where the experts could suggest changes. The instruments were made available on the Google Drive® platform. The selection of the participating experts was conducted according to the criteria of the Delphi technique, which consists of the valuation of the knowledge and practical experience of the specialist, referring to the object of study. We included in the sample doctors and nurses with experience in the care and/or research, with at least the qualification of specialist in one or more of the following areas: obstetrics, urology or urogynecology. We also carried out descriptive statistical assessment of the data (mean, median and standard deviation). The scores of the questions were submitted to the analysis to verify the level of agreement of the respondents for each question. The consensus considered for the inclusion of the recommendation was  $\geq 80\%$  (2). The answers to the open questions were evaluated and grouped according to similarity, relevance and pertinence. The suggestions for change were compiled after each round and added to the instruments of the subsequent rounds.

### Results

After the analysis of the collected material, 23 articles of the first search and four international guidelines of the second search were selected, which subsidized the elaboration of 48 clinical recommendations for PUR prevention and treatment. In order to compose the recommendations to identify and prevent PUR, we considered the evidences that portrayed the risk factors for PUR, as well as the measures to avoid their occurrence and possible complications. Evidence was also used on the ways of treating overt and covert PUR and re-education of the bladder in cases of persistent PUR. The 48 clinical recommendations were distributed in three domains: 18 (37.5%) recommendations to prevent overt and covert PUR, 14 (29.2%) recommendations to treat overt and covert PUR, and 16 (33, 3%) recommendations for re-educating the bladder in persistent PUR. After the first round, ten recommendations were modified and after the second round, two recommendations were modified based on the opinions issued by the experts. The number of specialists per round participating in the study is shown in Table 1.

Table 1 - Sample of the study according to the panel round Delphi

Stage	Sample	Answered by	% Participation
Round 1	29	19	65,5%
Round 2	19	16	84,2%
Round 3	16	13	81,3%

There was a gradual increase in the consensus of inclusion of the recommendations among the specialists, as the rounds progressed. In the first round, the specialists had access to the 48 recommendations without knowing the evidence that substantiated them. In the second round, the experts had access to the evidence of recommendations categorized according to the level and grade of recommendation and the 48 recommendations changed after the first round. In the third round, the experts had access to the level of agreement obtained in the previous round, to the opinion of their peers and to the 48 recommendations changed after the second round. At the end of the study, it was possible to obtain inclusion consensus for 39 recommendations, 12 (30.8%) to prevent overt and covert PUR, 12 (30.8%) to treat overt and covert PUR, and 15 (38.4 %) To re-educate the bladder in persistent PUR. Table 2 shows the distribution of recommendations with inclusion consensus  $\geq 80\%$ .

Table 2 - Distribution of the recommendations with inclusion consensus according to the panel round Delphi

Domain	Round 1	Round 2	Round 3	Final Consensus (%)
	Recommendations with consensus ≥80%	Recommendations with consensus ≥80%	Recommendations with consensus ≥80%	
1	7	10	12	30,8%
2	0	6	12	30,8%
3	7	10	15	38,4%

#### Interpretation of results

Risk factors and evidence found in the literature provided support for the development of clinical recommendations. In addition, the Delphi panel composed of experienced experts was essential in the process of validation and improvement of the recommendations, given the critical capacity and the involvement of each one of the members. The experts made several suggestions for the recommendations, some of which were aimed at semantics and clarity, others to patient safety. It can be inferred that the opinions were contextualized from the previous knowledge and practical experience of each specialist, judging, mainly, by their commitment to the safety and well-being of the postpartum patient. The Delphi panel ends when an acceptable degree of consensus is reached and, generally, three rounds are sufficient to achieve consensus, with most adjustments occurring between the first and second (3). Even after the three rounds of the Delphi panel, nine recommendations did not reach inclusion consensus. The opinions expressed by the experts on the recommendations with a consensus of inclusion and exclusion provided important inputs that can be considered in the decision-making process. Regarding the relevance of this consensus, as the first to be carried out in this area, it is believed that it is necessary to periodically review and update these recommendations, due to the rapid evolution of knowledge in the health area.

#### Concluding message

Through a rigorous methodology, it was possible to obtain inclusion consensus for 39 recommendations to prevent and treat overt and covert PUR and re-educate the bladder in persistent PUR.

#### References

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#### Disclosures

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