Nifedipine (sublingually) in obstetrics: caution for optimal results

Nifédipine (sublingual) en obstétrique : à utiliser avec prudence pour des résultats optimaux

Nifedipine was used extensively for hypertensive urgency in 1990s, but it has been recognized that it could induce profound drop in blood pressure, leading potentially to organ hypoperfusion, including myocardial infarction. Thus, nifedipine is not recommended for hypertensive urgency, and has not been approved by Food and Drug Administration in US for this indication [1]. Reports against nifedipine were concentrated on its potential over-acting as a hypotensive agent that could prompt sometimes ischemia (in spite the fact that nifedipine is an antiischemic drug). Interestingly enough, papers dealing with hypertensive urgencies that were contra usage of nifedipine in this situation rarely quoted an obvious reason – its potential to induce/worsen heart failure (because of negative inotropic effect) [2].

Nowadays, nifedipine has its revival [3] and it is believed to be the best tocolytic [4] and the most cost effective tocolytic available [5].

Nevertheless, published reports warn us that nifedipine and nicardipine can cause pulmonary edema [6,7], which is life-threatening condition. In order to minimize patient’s risk and to maximize benefit, we all should be aware of nifedipine’s potentially harmful action – negative inotropic effect – positive chronotropic action – sometimes unpredictable exaggerated hypotensive effect. It is very important, since calcium channel blockers, particularly nifedipine, are being increasingly used and since recent Royal College of Obstetricians and Gynaecologists guidelines [8], published in the UK, have recommended either nifedipine or atosiban for the treatment of preterm labor [4].

References


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