

Abstract

Background and objective: Abdominal cavity like other closed cavities, has limited capacity with acceleration of intra abdominal pressure (IAP) more than this certain capacity itself as syndrome which called intraabdominal compartment syndrome. For this increasing, there are two origin: blood and edema.

When the pressure rise more than 15 mmHg, the serious physiologic variations will start. The dislocation of diaphragm towards up, will reduction of venous return to heart and acceleration of after load, cardiac cut put will decrease and cause to hypotensia. With continuity of acceleration of IAP, renal failure will happen. If the IAP isn't reduced, the death will surely happen.

In the studies the mortality more than 50% reported even with appropriate care.

Our aim from this study is to find the prevalence rate of intra abdominal compartment syndrome in patients who hospitalized in ICU of surgery, also we wanted to determine the risk factor for this syndrome and mortality rate in them. From the results of this research we can have appropriate screening in patients with high risk and with lowering of IAP in them, the death will be prevented.

Methods: In this descriptive – analytic study, all the patients who hospitalized in ICU of Fatemi hospital from 1 of Azar 1383 to 1 of Azar 1384 that have surgical problems had been done. At the time of entrance of patients to ICU, IAP of them was measured by measuring of intra vesical pressure and registered in questionnaire of them. If the primitive pressure was more than 15mmHg, the intra vesical pressure would be measured again every 6 hours.

Also in patients whom the primitive pressure less than 15mmHg but in next few days there was some suspicious symptoms like breathing failure, oliguria, hypotension or distended abdomen, the screening would be done for them too.

The data and information of questionnaire was collected and finally it analysed by SPSS software.

Results: From the 187 patients who had been hospitalized in ICU Fatemi hospital of Ardebil during one year, 64 patients (34.22%) have IAP>15mmHg and suffering form intra abdominal compartment syndrome. That from these patients, 36 person (56.25%) were more than 50 years old. Common etiologies in these patients were respectively: multiple trauma with 28 patients (43.75%), pretonitis with 10 patients (15.63%) and colesystithis with 8 patients (12.5%).

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From 64 patients with ACS, 23 patients (35.93%) died. So the higher pressure in abdomen, the higher mortality.

Conclusion: Because of Fatemi hospital of Ardebil is the only trauma referral center of county and also the role of trauma in Intra abdominal compartment syndrome, the prevalence rate of intra abdominal compartment syndrome in our survey was more than others. So screening program in all of patients whom hospitalized in ICU of surgery of Fatemi hospital can help in rescue of these patients.

Key words: Intra abdomen compartment syndrome / Intra abdominal pressure / Intra visceral pressure / multiple trauma / Fatemi hospital / Ardebil.