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LETTER TO THE EDITOR

Getting Better in Open Abdomen Surgery

Open Abdomen Cerrahisinde Daha İyiye

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Dear Editor,

Open abdominal surgery, which is recommended worldwide after injury control surgery for major trauma, abdominal compartment syndrome (ACS) and abdominal sepsis, can be life-saving many times.1 When ACS develops, many systems such as bowel, lung, heart, kidney and central nervous system are adversely affected.[1] When ACS is not treated, it is 100% mortal.[2] Organ hypoperfusion, microperfusion deterioration, ischemia, acidosis and developing bacterial translocation in the intestines further increase the compartment. Acute renal failure develops due to decreased renal perfusion in the kidneys, increased resistance in renal venous structures, increased activation in renin angiotensin system, increased antidiuretic hormone, and oliguria.[1] With the developing ACS, the diaphragm is elevated and has a negative effect on the lung by causing decrease in lung compliance, development of atelectatic areas and hypoxia.[3] Intracranial pressure also increases with ACS. This causes cerebral hypoperfusion and therefore a decrease in Glaskow Coma scale score. In addition, a decrease in the preload of the heart develops due to the negative effect that develops on the renal and mesenteric veins in ACS, and an increase in afterload develops due to increasing peripheral vascular resistance. It results in a decrease in cardiac output and hypoxia.[1] Therefore, ACS should be suspected when dyspnea, abdominal distension, tachypnea, orthopnea, oliguria, decrease in mean arterial pressure and increase in positive fluid balance are detected. Open abdominal surgery can be applied not only in ACS, but also in traumatic and hemorrhagic shock and non-traumatic patients in septic shock. In cases of intra-abdominal sepsis, if source control could not be done, ACS is present and reoperations are planned, open abdominal surgery is recommended. In patients with open abdomen in whom many methods such as Bogota-bag, negative pressure system and full or semi-dynamic abdominal closure systems are applied in surgical treatment, unfortunately, applying only surgical methods cannot be life-saving. Before proceeding with abdominal closure methods, the patient's hemodynamics should be stabilized absolutely. For this reason, all affected systems should be handled individually. A general surgery specialist who wants to work in this field, is devoted to the open abdominal, does not work in consultation method and makes morning and evening patient visits regularly, and makes data entry and treatment regularly, is needed. A team consisting of general surgery, neurology, cardiology, chest diseases, general internal medicine, anesthesia and reanimation, vascular surgery and psychiatry specialists should evaluate the patient absolutely. It should be ensured that the hemodynamics is stabilized and then the abdomen should be closed.

As a result, open abdominal surgery should not only be a subject that general surgeons deal with alone, but should be a subject that should be intervened with a multi-disciplinary approach.

Ethics

Peer-review: Externally peer reviewed.

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