Letter to editor

Dear editor

With warm greetings

Is the Plume of the Surgery on the Covid 19 Patient in the Pandemic Era (world fight)

Definitely Safe? What Must to Do?!!!!

With becoming the corona virus pandemic in Iran and the world it is important for the surgeons care of all the corona patients if he or she must be operated surgically. As it is a rule that the safety of the patients and all the workers of the operating room is one of the important responsibilities of the physician which we discuss for it in this letter.

Inducing of the aerosol in the cauterization depends to the temperature as the temperature increases the formation of aerosol will be increased (1) this aerosol contains 95 % water and 5% particles (1) these particles contain blood and tissue also it may contain the corona virus which lives for three hours in the place. The Aerosol contains bacteria and virus which may be spread in the space and in the further place, the presence of the virus and bacteria in the aerosol have been confirmed which including HPV virus and AIDS virus and hepatitis B virus and mycobacterium tuberculosis (2) which may induce an infection of the surgeon and the staff of the operating room and also it may contaminate the garments of the staff of the operating room. The presence of the virus covid 19 in the urine of the patient with covid 19 virus-positive has been confirmed (3). The Surgical smoke contains much toxic gas, Specifically benzene and butadiene like in the smoke of the cigar rete and 10 and 17 times more than in the second-hand smoker (4). In TURP (trans urethra prostate resection) 16 kinds of the carcinogen gas and in TURBT (transurethral resection bladder tumor) 39 kinds of carcinogen gas have been detected and in a study laparoscopic nephrectomy was associated with 5 kinds of the carcinogen gas (5,6) but in the pandemic covid 19 virus the transmission of the virus by surgery as an aerosol cannot be excluded (7). The aerosol in the operating room must be considered a one of the important problems which must be defeated by the negative pressure and the suctioning. For the safety of surgeons and the staff of the theater room, especially for the caring in the operation of a patient suspicious to covid 19 defeating aerosol by precious negative pressure and suctioning looks justice until the presence of the definitive evidence about the absence of the covid 19 in the surgery smoke of the suspicious to co vid 19 will be provided (7).

With best regards

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