

Utility of open remote access medical advice in the COVID-19 pandemic among liver pre- and post-transplant patients

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TO THE EDITOR,

At the beginning of the coronavirus disease-2019 (COVID-19) pandemic the Hadassah University Hospital, Ein Kerem campus was designated as a COVID-19 receiving and treatment hospital. While many elective services were discontinued at the hospital, the liver service and liver transplantations continued. To provide needed services for these patients, a hotline administered by a senior liver physician, serving 262 post-liver transplantation and 78 pre-transplant patients was established on 1 April 2020 and was operational until 28 September 2020. Announcement of the service was sent to patients on two occasions via telephone text messages or WhatsApp messaging services.

During the period that the hotline was operational, there was a 26% reduction in Hadassah liver clinic attendance and a 44% reduction in the number of outpatient liver transient elastography studies performed compared to the same months

in 2019. Fourteen Hadassah patients from the transplant list underwent liver transplant during the study period, compared to 13 during the same period in 2019. Between January and October 2020, 12 patients on the national Israeli liver transplant waiting list died compared to 9 in a comparable period in 2019.

During the study period, 89 hotline communications were received; 59 (66%) of which were directly related to questions about COVID-19. Only 22/340 (6.5%) of the pre- and post-transplant patients or their families utilized the hotline. An additional six patients from the general liver clinic who were not pre- or post-transplant patients used the hotline. Overall, 28 patients or their families utilized the service. Of these patients, 15 used the hotline once and 13 were multiple users, with one patient contacting the hotline service 39 times. There was no statistical difference between the hotline utilization of pre-transplant patients (6/78, 7.7%) and post-transplant patients (16/262, 6.1%), ($P = 0.6$).

The age of the pre- and post-transplant patients for whom the hotline was used was younger (49.5 ± 15.5 years) than the overall pre-transplant patient (55.9 ± 13.1 years) and post-transplant patient populations (58.1 ± 14.1 years), ($P = 0.007$), but did not differ in gender from them. Hotline utilization among Jewish patients (16/225, 7.1%) was not statistically different from that of Arab patients (6/115, 5.2%), ($P = 0.5$).

Because of low utilization, the hotline service was discontinued. The failure of the hotline may be explained by the inadequate health literacy of some of the patients, insufficient promotion and/or design of the service or that patients received their advice and information from other sources, such as the treating hepatologist.

The COVID-19 pandemic has caused a national health crisis. Possible future mutations of the coronavirus, coupled with sub-optimal vaccination rates can mean the pandemic will be with us for a long time. More effective outreach programs than the one we attempted need to be developed to provide services for chronic patients [1,2]. One possibility may be to make the communications more pro-active by contacting patients on a schedule akin to regular clinic follow-up programs [3].

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Capsule

Stopping the cells swarm

Neutrophils play a major role in the early immune response and are recruited in large numbers into inflamed and infected tissues. By secreting chemoattractants that bind G protein-coupled receptors (GPCRs) on neighboring cells, neutrophils coordinate their behavior as a swarm. Less clear is how this auto-amplifying swarming activity is ultimately turned off. Kienle and colleagues showed that desensitization of these GPCRs by the same

chemoattractants by GPCR-kinase 2 (GRK2) is one way in which these swarms are shut. Unexpectedly, mice with GRK2-deficient neutrophils showed impaired rather than enhanced bacterial clearance. The heightened scanning ability of GRK2-deficient neutrophils may come at the cost of suboptimal phagocytosis and containment of bacteria.

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