

Urgency and emergency treatments in cardiovascular surgery during the COVID pandemic: results of extremized HUB and spoke organization in northern Italy.

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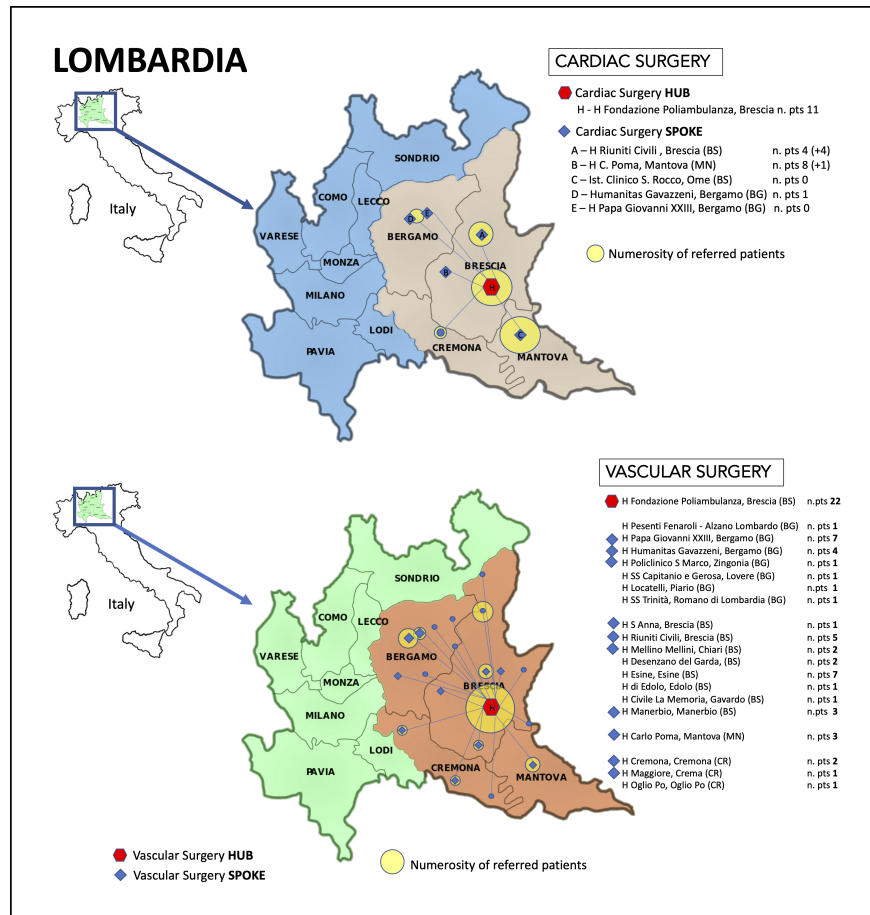
Abstract

OBJECTIVES: Feasibility and results of cardiovascular hub-spoke networks to face COVID19 pandemic. The COVID-19 pandemic in Italy had the primary outbreak in the northern part of the country forcing the regional health care system to expand the availability of beds in the wards and intensive care units and to institute a Hub and Spoke hospital network to ensure assistance continuity for urgencies and emergencies. We report a descriptive analysis of the activity of the first 30 days of the Hub center. **METHODS:** Role of our Hub center was to guarantee 24/24h 7/7days cardiovascular surgical care for an area of 3.145.312 inhabitants' area. Hub-spoke reorganization permitted a significant increase of ICU and ward beds availability for COVID patients needing hospitalization in all peripheral centers. Records of all consecutive patients admitted were collected and analyzed. **RESULTS:** a total of 100 patients were evaluated in the study period . Hub and spoke cooperation have been successful, all patients affected by cardiovascular urgencies or emergencies found a highly specialized hospital and was evaluated and treated. Global reduction of elective and non-deferrable interventions in spoke centers was achieved for both vascular and cardiac surgery while we detected a significant increase of urgent vascular interventions for acute limb ischemia. We did not observe an increase of in-hospital mortality in non-infected patients. **CONCLUSION:** Hub and spoke network for cardiovascular pathology is an effective way to face healthcare needs during the pandemic.

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