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EDITORIAL

Surgery in Italy. Criteria to identify the hospital units and the tertiary referral centers entitled to perform it

A proposal for esophageal, hepatic, pancreatic and colo-rectal surgery

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Just by looking at the first 5 months of the year 2016 through a PubMed search for the keywords "Centralization" and "Surgery", we can find 17 brand new papers dealing with this issue. Of note, 10 out of 17 are strictly focused to HPB, upper and lower GI tract surgery [1–10]: we are clearly dealing with a "burning topic"!

Countries with formal policies of centralization have lower mortality and longer survival than those obtained before and of those countries without centralization programs.

In Italy, most of the esophagectomies and gastrectomies for cancer are performed in very low volume centres with limited experience and without a formal policy of centralization. In particular, in 2014 161 hospitals with a median of two esophagectomies/year performed 764 esophagectomies; 133 hospitals performed 1–5 esophagectomies/year; and only eight centers performed more than 15 esophagectomies/year. High volume centers (those with $\geq$20 cases/year) are few but, even if managing patients with more relevant comorbidities, they report lower mortality and a shorter length of stay [11].

In the field of colorectal surgery, higher is the number of surgical procedures in a hospital, lower is the rate of mortality, complications, length of hospital stay, and costs. And prognosis is also better [12, 13]. With regards to the colon cancer, the suggested number of cases per year is at least of 50 and mortality within 30 days continues to decrease with the increasing volume activity. As for rectal cancer, with higher definition difficulties and major pathological and multidisciplinary complexity, the threshold is established at about 15 cases/year [14, 15].

A recent Italian study clearly shows that patients suffering from colorectal liver metastasis and treated in referral Centres receive the "best treatment" with better surgical outcomes and long term survival [14]. Moreover, it is very interesting to note how an inter-hospital network and partnership is able to level the results achieved between higher and lower volume Centres for liver surgery, suggesting the feasibility of accreditation pathways [15].

With regards to pancreatic surgery, an elegant nationwide analysis in our country carried out by the Associazione Italiana Studio Pancreas (AISP) showed that, between 2010 and 2012, 544 hospitals performed 10,936 surgical operations for pancreatic cancer. The probability of undergoing palliative/explorative surgery was inversely related to the volume, being 24.4 % in very high-volume and 62.5 % in very low-volume hospitals. The mortality of non-resective surgery was significant inversely related to volume. Surprisingly, mortality of non-resective surgery was significantly higher than that due to resective surgery (8.2 vs 6.7 %). The excess cost for the National Health System from surgery overuse was estimated at 12.5 millions of Euro [16].

Indicators of effectiveness and quality of care are urgently needed to improve the outcomes in the field of major general surgery, and particularly in the field of the so-called "rare diseases".

It seems to be absolutely appropriate and present the need felt by the President of the Società Italiana di Chirurgia to devote a specific Commission within the Council dealing with "Accreditation and Quality". I have been appointed as the coordinator of such Commission, and my first goal has been to collect the feelings and the

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opinions of the Italian surgeons those who were already interested in the topic as well as the authors of papers focused on the topic.

Altogether, we decided to focus our attention in the field of HPB, Upper and Lower GI tract surgery; and the final results of this work are presented in the four position papers hosted in this journal.

Moreover, thanks to the close relationship with the Società Italiana di Chirurgia Oncologica we decided to dedicate ourselves also to the challenging field of the "rare tumors". The conclusion of this work will be published later, in the no. 4 of Updates in Surgery.

These papers are also the final result of the long work of discussion with many outstanding surgical centers in our Country and politicians involved in the administration of the National Health System We thought that the official journal of the Società Italiana di Chirurgia should represent the best "ambassador" to spread the present state of the art, ideas, opinions, arguments and solutions, taking also the opportunity of comments by surgeons from other countries.

The patient safety has to be the main and crucial standpoint. At the same time, we have to preserve and defend the professional rank of each Italian surgeon: the opportunity to follow accreditation pathways must be ensured and certified by Scientific Societies.

Moreover, concerns about the actual accessibility to high volume hospitals for individuals of lower social classes have emerged in different countries applying centralizations programs: this must be already heard in our mind.

This last concern is of masterpiece importance and needs careful evaluation. Moreover, the assessment of expertise, quality of experience evaluated by scientific evidence and characterized by a multidisciplinary approach defining clinical care pathways and guidelines at international level with adequate human, structural and technological resources with monitoring and evaluation of the outcome, are other crucial items to be faced in the next future.

The aim of the papers dealing with the topic in this Volume of Updates in Surgery is to identify the organizational, structural and volume requirements for accreditation of a unit as an Upper/Lower GI tract and HPB surgery centre, consequently stimulating thoughts among Italian surgeon. It is a first step: the discussion is now open.

Compliance with ethical standards

Conflict of interest The author declare that he has no conflict of interest.

Statement of human and animal rights This article does not contain any studies with human participants performed by any of the authors.

Informed consent For this type of study formal consent is not required.

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