IMPLEMENTING LAPAROSCOPY IN BRAZIL’S NATIONAL PUBLIC HEALTH SYSTEM: THE BARIATRIC SURGEONS’ POINT OF VIEW

Adesão dos cirurgiões bariátricos à laparoscopia no sistema único de saúde do Brasil

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ABSTRACT – Background: Although Brazilian National Public Health System (BNPHS) has presented advances regarding the treatment for obesity in the last years, there is a repressed demand for bariatric surgeries in the country. Despite favorable evidences to laparoscopy, the BNPHS only performs this procedure via laparotomy. Aim: 1) Estimate whether bariatric surgeons would support the idea of incorporating laparoscopic surgery in the BNPHS; 2) If there would be an increase in the total number of surgeries performed; 3) As well as how BNPHS would redistribute both procedures. Methods: A panel of bariatric surgeons was built. Two rounds to answer the structured Delphi questionnaire were performed. Results: From the 45 bariatric surgeons recruited, 30 (66.7%) participated in the first round. For the second (the last) round, from the 30 surgeons who answered the first round, 22 (48.9%) answered the questionnaire. Considering the possibility that BNPHS incorporated laparoscopic surgery, 95% of surgeons were interested in performing it. Therefore, in case laparoscopic surgery was incorporated by the BNPHS there would be an average increase of 25% in the number of surgeries and they would be distributed as follows: 62.5% via laparoscopy and 37.5% via laparotomy. Conclusion: 1) There was a preference by laparoscopy; 2) would increase the number of operations compared to the current model in which only the laparotomy is available to users of the public system; and 3) the distribution in relation to the type of procedure would be 62.5% and 37.5% for laparoscopy laparotomy.

INTRODUCTION

Despite advances in health field, obesity has been an increasing problem for public health in the last decades1,2, both in developed and in developing countries, showing high rates of morbidity and mortality3,4. According to the World Health Organization (WHO)5, the prevalence of overweight in the world is about 1.9 billion people and about 600 million are obese. According to the Brazilian Survey of Surveillance of Risk Factors and Protection for Chronic Diseases by Telephone Inquiry (Vigitel)6, for the first time the percentage of people with overweight overcomes more than half of Brazilian population, i.e., 51% of population older than 18 years old is above the ideal weight, 52% men and 48% women. At the age between 18 and 24, 24% of population is above the ideal weight and 7% is obese. For people aged 35 and 44, these numbers are 55% and 19% respectively. If nothing is done to reverse this epidemic, there is an estimative that by 2030 there will be three billion obese people worldwide7.

The Brazilian National Public Health System (BNPHS) was created in 1988. It grants all citizens the right to get medical assistance, exams, hospitalization, and treatment in
accredited health centers. About 75% of Brazilian population depends solely on this system. Currently the BNPHS counts on 78 accredited health facilities to provide high standard assistance to patients with morbid obesity throughout 20 states. Twelve of these states have not achieved 96 procedures a year, as requested by the present legislation to keep the accreditation, which indicates inequality of access for morbid obese to the surgical procedure in those states. At national level, 5,357 surgeries were performed in 2011 in the BNPHS and, in 2012, this number increased slightly (almost 6,000 surgeries). However, in the private sector (private health insurance and direct payment), about 64,000 surgeries were performed in 2012, i.e., almost 11 times the amount of surgeries performed by BNPHS. In the last years, although BNPHS has presented improvements concerning organization and expansion of preventive actions and treatment for obesity, the supply for this surgery coverage in the country is still very low.

Another important issue to be considered is that laparoscopic surgery is not available in the BNPHS, even scientific evidences pointing to the fact that laparoscopic access is superior when compared to laparotomy in terms of reduction mortality, morbidity, faster recovery, better healing, reduction of immediate and late complications such as operative wound, incisional hernias, fistulas and adhesions.

The objective of this study was to estimate: 1) whether bariatric surgeons would support an eventual incorporation of laparoscopy by the BNPHS; 2) whether there would be an increase in the total amount of surgeries performed by the BNPHS in case there was this new via of access; and 3) what would be the distribution between laparoscopy and laparotomy accesses if both were available in the BNPHS.

METHODS

For this application of the Delphi method, was constructed a panel of experts. From 45 bariatric surgeons who attended the national event of the Brazilian Society of Metabolic and Bariatric Surgery held in June 2013, 32 participated in the survey, responding to a structured questionnaire previously developed for this purpose. In October 2013, which corresponded to the second round, the same questionnaire was applied, however, by electronic means (e-mail) to all participants in the first round.

In two rounds, besides a brief introduction about the objective of the questionnaire, three questions were asked:

Currently, how many Roux-en-Y gastric bypass (BPGYR) via laparotomy (open) are monthly performed in the hospital where you work sponsored by NPHS?

In case laparoscopic access (video) was incorporated by NPHS, would the medical team be interested in perform it?

In the new scenario where NPHS would sponsor both access – open and video – how much would you expect NPHS needs to offer for BPGYR in your hospital?

These questions were asked aiming to know about three issues: 1) surgeon interest for an eventual incorporation of laparoscopic access by the BNPHS; 2) the potential increase in the offer of surgeries by the BNPHS in case laparoscopic access was incorporated; and 3) what would surgeons choose if surgeries by both via, laparotomy and laparoscopy, were available.

Statistical analyses

Data analyses were conducted by the program SPSS 19.0. Quantitative variables with asymmetric distribution were described by median and interquartile interval and then compared by Wilcoxon’s test. For categorical variable it was used the test of Mac Nemar. It was considered as level of significance 5%.

RESULTS

From the 45 bariatric surgeons who attended the Brazilian Society of Metabolic and Bariatric Surgery event in 2013, 32 answered the Delphi questionnaire (Table 1), which represented the first round of the study. However, two specialists were not able to answer it, as they did not perform surgeries via laparotomy. Thus, 30 surgeons effectively participated in the first round. In the second, and last round, from the 30 respondents, 22 answered the questionnaire.

Table 2 shows the results of both rounds of questionnaires answered by the specialists. As observed in question 1, there was no statistically significant change in the number of surgeries performed via laparotomy by the BNPHS between both rounds. Regarding question 2, two specialists changed their opinion from one round to the other. When comparing answers from the two rounds it was observed that there was an interest over to 95% for the laparoscopic access and no statistically significant change between rounds.

DISCUSSION

This paper showed the opinion of bariatric surgeons about an eventual incorporation of laparoscopic surgery into the Brazilian public health system. It seems that there is a strong support by these professionals in favor to laparoscopic surgeries in terms of introducing them in the public health
Moreover, it shows to be effective to laparotomy, year, NPHS performs about 6,000 interventions and all via laparotomy. Among the total bariatric surgeries performed in the country, 95% of surgeons showed interest in performing it. Those who suggested that some surgeries could be performed by laparotomy said that medical residents need to have the ability and knowledge to perform surgery via both accesses. Although bariatric surgery costs performed via laparotomy are higher than laparoscopy, evidences are favorable concerning safety and tolerance by patients. Moreover, it shows to be effective to solve comorbidities and loss of weight when compared to the conservative obesity treatment. Additional costs due to laparoscopic access are eventually compensated by lower probability of complications after surgery and, consequently, by the costs to solve them.

**CONCLUSION**

1. There was a preference by laparoscopy; 2) would increase the number of operations compared to the current model in which only laparotomy is available to users of public health system; and 3) the distribution in relation to the type of procedure would be 62.5% and 37.5% for laparoscopy and laparotomy.

**REFERENCES**