

Nonoperative treatment versus appendectomy for uncomplicated acute appendicitis

To the Editor,

We have read the article that is published by Kirkil et al. (1) with a great deal and interest. They have brought up nonoperative treatment of uncomplicated appendicitis versus appendectomy. Although nonsurgical treatment of acute appendicitis is an unsatisfied method for surgeons we have analyzed the article particularly. We want to emphasize some subjects that must be explained.

Appendicitis is one of the most common surgical diseases. The lifetime risk of the acute appendicitis is reported nearly 7% (2). Although nonoperative treatment of acute appendicitis looks like alternative to surgery it is not recognized by majority of surgeons. Nowadays laparoscopic appendectomy even single vs. multiple port is investigated.

Apurva et al. reported the rate of diagnosis of appendiceal adenocarcinoma who had previous diagnose as 3.1%. Although authors performed colonoscopy in suspected patients that must be in mind the success of colonoscopy with appendiceal malignancy is low. Also the criteria to perform colonoscopy are not well defined. As authors underlined; there is not enough data and study about this.

In our opinion there must be cost analyze of operative versus nonoperative treatment of noncomplicated appendicitis to support nonoperative treatment as an effective method. Preoperative diagnosis, medical treatment, hospital charges during follow up period and in case of need unavoidable surgery compose the cumulative cost of nonoperative treatment of noncomplicated appendicitis (3). Early noncomplicated acute appendicitis has lower cost according to the complicated appendicitis. Effective surgery could prevent increase of hospital cost (4).

However Kirkil et al. indicated that nonoperative treatment of noncomplicated acute appendicitis is an effective treatment method we believe that a diagnostic algorithm must be used during diagnosis and treatment of acute appendicitis.

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REFERENCES

- Kırkıl C, Yiğit MV, Aygen E. Long-term results of nonoperative treatment for uncomplicated acute appendicitis. Turk J Gastroenterol 2014; 25: 393-7. [CrossRef]
- 2. Trivedi AN, Levine EA, Mishra G. Adenocarcinoma of the appendix is rarely detected by colonoscopy. J Gastrointest Surg 2009; 13: 668-75. [CrossRef]
- 3. Liese J, Halbinger TM, Ulrich F, Bechstein WO, Strey CW. Appendicitis-the balance between cost effectiveness and safety remains challenging. Langenbecks Arch Surg 2014; 399: 493-501. [CrossRef]
- Kong V, Aldous C, Handley J, Clarke D. The cost effectiveness of early management of acute appendicitis underlies the importance of curative surgical services to a primary healthcare programme. Ann R Coll Surg Engl 2013; 95: 280-4. [CrossRef]

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Author's Reply

To the Editor,

I would like to thanks for the reader who contributed his or her valuable comments. I also would like to apologize to the reader. I could not appeal to the reader with his or her name because it was not informed to me.

The reader referring to Apurva et al. reported that the rate of diagnosis of appendiceal adenocarcinoma who had previous diagnose as 3.1%. Indeed, Carpenter et al. reported that the risk of neoplasm in appendicitis treated with interval appendectomy was higher as 28% (1). On the other hand, Charfi et al. who had retrospectively

studied on 24,697 histopathological reports of appendectomy specimens reported that neoplastic lesions were present in 0.7 per cent of specimens (2). Although the big differences between the neoplasm rates seem confusing, it is recommended that colorectal cancer screening (colonoscopy is preferred if available) should be performed to people who are older than 50 years old (even if they have not other risk factors, e.g., history of adenoma or inflammatory bowel disease) in NCCN Guidelines V2.2012. In the presented study, we performed colorectal cancer screening according to NCCN Guidelines' proposals. Recently, two people who had a right to say in acute care surgery, put in a written form the changing perspectives in appendicitis (3). They emphasized that neoplasms were uncommon, occuring in less than 1% of appendectomies and that patients older than 40 years treated nonoperatively should have a colonoscopy to rule out cancer or alternative diagnosis.

I also believe that there must be cost-effectiveness studies focused on operative versus nonoperative treatments. Actually, Turhan et al analyzed hospital costs of nonoperative and operative treatments for acute appendicitis (4). They reported that the mean cost of nonoperative treatment was 433 USD. It was 559 USD for operative treatment. The reader is right that preoperative diagnosis, medical treatment, hospital charges during follow up period and in case of need unavoidable surgery compose the cumulative cost of nonoperative treatment of noncomplicated appendicitis. Furthermore, cost of work loss after appendectomy and treatment costs of long-term complications of appendectomy (e.g., adhesions) should be taken into account. However, the studies mentinoed by the reader (5,6) did not focused on comparison between operative and

nonoperative treatment. Liese et al. (5) focused on cost effectiveness of CT scans in patients underwent surgery, and Kong et al. (6) focused on cost effectiveness of surgery in patients with complicated or noncomplicated acute appendicitis.

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REFERENCES

- Carpenter SG, Chapital AB, Merritt MV, Johnson DJ. Increased risk of neoplasm in appendicitis treated with interval appendectomy: single-institution experience and literature review. Am Surg 2012; 78: 339-43.
- 2. Charfi S, Selami A, Affes A, Yaich K, Mzali R, Boudawara TS. Histopathological findings in appendectomy specimens: a study of 24,697 cases. Int J Colorectal Dis 2014; 29: 1009-12.
- 3. Teixeira P.G.R., Demetriades D. Appendicitis: changing perspectives. Adv Surg 2013; 47: 119-40.
- 4. Turhan AN, Kapan S, Kütükçü E, Yiğitbaş H, Hatipoğlu S, Aygün E. Comparison of operative and non operative management of acute appendicitis. Ulus Travma Acil Cerrahi Derg 2009; 15: 459-62
- Liese J, Halbinger TM, Ulrich F, Bechstein WO, Strey CW. Appendicitis-the balance between cost effectiveness and safety remains challenging. Langenbecks Arch Surg 2014; 399: 493-501.
- Kong V, Aldous C, Handley J, Clarke D. The cost effectiveness of early management of acute appendicitis underlies the importance of curative surgical services to a primary healthcare programme. Ann R Coll Surg Engl 2013; 95: 280-4.

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