World Journal of Gastroenterology

Submit a Manuscript: https://www.f6publishing.com

World J Gastroenterol 2020 November 7; 26(41): 6510-6513

DOI: 10.3748/wjg.v26.i41.6510

ISSN 1007-9327 (print) ISSN 2219-2840 (online)

LETTER TO THE EDITOR

Comment on "Updated meta-analysis of pancreatic stent placement in preventing post-endoscopic retrograde cholangiopancreatography pancreatitis"

Jiang-Tao Chu

ORCID number: Jiang-Tao Chu 0000-0002-4591-0396.

Author contributions: Chu JT performed the research, analyzed the data and wrote the letter.

Conflict-of-interest statement: No funds were received in support of this work. There are no relevant financial activities outside the submitted work.

Manuscript source: Unsolicited manuscript

Specialty type: Gastroenterology and hepatology

Country/Territory of origin: China

Jiang-Tao Chu, Department of Endoscopy, National Cancer Center, Cancer Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing 100021, China

Corresponding author: Jiang-Tao Chu, MD, Doctor, Department of Endoscopy, National Cancer Center/National Clinical Research Center for Cancer/Cancer Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College, No. 17 Panjiayuan, Chaoyang District, Beijing 100021, China. cjtcg@163.com

Abstract

I read with interest an article "Updated meta-analysis of pancreatic stent placement in preventing post-endoscopic retrograde cholangiopancreatography pancreatitis" by Fan and colleagues *in World J Gastroenterol* 2015; 21(24): 7577-7583. Although I appreciate their work, I have found problems with the data extracted and analyzed by the authors, and will give my comment in this letter. It would be valuable if the authors could provide an accurate estimation of their extracted data.

Key Words: Meta-analysis; Pancreatic stent; Post-endoscopic retrograde cholangiopancreatography; Pancreatitis

Core Tip: Data extraction errors appeared to exist in a published meta-analysis entitled "Updated meta-analysis of pancreatic stent placement in preventing post-endoscopic retrograde cholangiopancreatography pancreatitis" by Fan and colleagues in *World J Gastroenterol* 2015; 21(24): 7577-7583.

Citation: Chu JT. Comment on "Updated meta-analysis of pancreatic stent placement in preventing post-endoscopic retrograde cholangiopancreatography pancreatitis". *World J Gastroenterol* 2020; 26(41): 6510-6513

URL: https://www.wjgnet.com/1007-9327/full/v26/i41/6510.htm

DOI: https://dx.doi.org/10.3748/wjg.v26.i41.6510

Peer-review report's scientific quality classification

Grade A (Excellent): 0
Grade B (Very good): 0
Grade C (Good): C, C
Grade D (Fair): 0
Grade E (Poor): 0

Received: July 10, 2020
Peer-review started: July 10, 2020
First decision: August 8, 2020
Revised: August 21, 2020
Accepted: September 29, 2020
Article in press: September 29, 2020
Published online: November 7, 2020

P-Reviewer: Abdollahi M, Saito
S-Editor: Gong ZM
L-Editor: MedE-Ma JY
P-Editor: Ma YJ

TO THE EDITOR

I read with interest the article "Updated meta-analysis of pancreatic stent placement in preventing post-endoscopic retrograde cholangiopancreatography pancreatitis" by Fan *et al*[1]. In this study, the authors performed an updated meta-analysis to evaluate the prophylactic effect of pancreatic duct (PD) stents in post-endoscopic pancreatitis (PEP). This is a significant study. However, after reading the article carefully, I found some worthwhile issues which I would like to discuss with the authors.

First, in the meta-analysis, the authors finally included 15 randomized controlled trials. Two of the 15 studies were labeled with the same reference, but the extracted data were different (Figure 1). This makes me doubt the accuracy of the data. I retrieved published clinical trials on prophylactic PD stents to prevent PEP from MEDLINE (between 1980 and May 2013), EMBASE (between 1980 and May 2013), and the Cochrane clinical trial databases. As a result, I have found that the data underlined in green do not exist. Therefore, I concluded that there were errors in the extracted data.

Second, in their study, the initial extracted data were inconsistent with the later data in the meta-analysis (Figure 2). The reason was not mentioned by the authors. Smithline *et al*[2] reported in 1993 a total of 98 alternately randomized patients: 50 to the no-stent group and 48 to the stent group. Stent placement was unsuccessful in 5 patients. If the number of patients who underwent treatment was used as the result in the meta-analysis, the total number of patients in the stent group should be 48. However, if the number of patients who were successfully treated was used as the result, the total number of patients in the stent group should be 43. In the meta-analysis, the authors did not describe the analysis method used.

In the study by Thanasky *et al*[3] in 1998, 80 patients were randomized to the stent (n = 41) or no stent groups (n = 39). One patient had mild pancreatitis in the stent group, another 2 patients in the stent group developed mild pancreatitis after stent extraction. So, the total number of patients in the stent group should be 41, and the number of event patients in the stent group should be 3.

In the study by Fazel *et al*[4] in 2003, two patients randomized to the PD stent group were excluded. If the intent-to-treat analysis was included, the total number of stents would be 40, and the number of event patients would be 2; the total number of people in the control group should be 36, and the number of event patients should be 7. But the authors did not state which analysis method was used.

In summary, we admire the efforts by the authors to clarify the role of pancreatic stent placement in preventing post-endoscopic retrograde cholangiopancreatography pancreatitis. Nevertheless, it would be valuable if the authors could provide an accurate estimation of the extracted data to address my questions.

Table 1 Characteristics of the included studies

Ref.	Type	Study type	Intervention	Stent	Patients	*n* (stent)	*n* (control)
Smithline *et al*[16], 1993	Article	RCT	Biliary ES	5-7F, 2-2.5 cm	SOD	43	50
Sherman *et al*[17], 1996	Abstract	RCT	Precut biliary ES	5-7F, 2-2.5 cm		46	58
Tarnasky *et al*[12], 1998	Article	RCT	Biliary ES	5-7F, 2-2.5 cm	SOD	41	39
Tarnasky *et al*[12], 1998	Abstract	RCT	Biliary ES	5F, 2 cm		36	38
Patel *et al*[18], 1999	Abstract	RCT	Pancreatic ES	5-7F, 2-2.5 cm	SOD	18	18
Fazel *et al*[19], 2003	Article	RCT	ERCP	5F, 2 cm	Difficult cannulation	38	36
Harewood *et al*[20], 2005	Article	RCT	Endoscopic ampullectomy	5F, 3-5 cm	Ampullary adenoma	11	8
Sofuni *et al*[21], 2007	Article	RCT	ERCP, *etc.*	5F, 3 cm	Various	98	103
Tsuchiya *et al*[22], 2007	Article	RCT	ERCP, *etc.*	5F, 3-4 cm	Various	32	32
Ito *et al*[23], 2010	Article	RCT	ES, IDUS	5F, 4 cm	With high-risk factors	35	35
Pan *et al*[24], 2011	Article	RCT	ERCP	5F	With high-risk factors	20	20
Sofuni *et al*[25], 2011	Article	RCT	ERCP, *etc.*	5F, 3 cm	With high-risk factors	213	213
Kawaguchi *et al*[26], 2012	Article	RCT	ERCP, ES, IDUS	5F, 3 cm	With high-risk factors	60	60
Cha *et al*[27], 2012	Article	RCT	ES	5-7F, 2-2.5 cm	Difficult cannulation	46	58
Lee *et al*[28], 2012	Article	RCT	ES, IDUS, *etc.*	3, 4, 6, 8F	Difficult cannulation	50	51

RCT: Randomized controlled trial; ES: Endoscopic sphincterotomy; IDUS: Intraductal ultrasonography.

Figure 1 Characteristics of the included studies, as reported by Fan *et al*[1]. The two underlined studies are labeled with the same reference, but the extracted data differ. Citation of the Figure: Tarnasky PR, Palesch YY, Cunningham JT, Mauldin PD, Cotton PB, Hawes RH. Pancreatic stenting prevents pancreatitis after biliary sphincterotomy in patients with sphincter of Oddi dysfunction. *Gastroenterology* 1998; 115: 1518-1524.

A

Table 1 Characteristics of the included studies

Ref.	Type	Study type	Intervention	Stent	Patients	*n* (stent)	*n* (control)
Smithline *et al*[16], 1993	Article	RCT	Biliary ES	5-7F, 2-2.5 cm	SOD	43	50
Sherman *et al*[17], 1996	Abstract	RCT	Precut biliary ES	5-7F, 2-2.5 cm		46	58
Tarnasky *et al*[12], 1998	Article	RCT	Biliary ES	5-7F, 2-2.5 cm	SOD	41	39
Tarnasky *et al*[12], 1998	Abstract	RCT	Biliary ES	5F, 2 cm		36	38
Patel *et al*[18], 1999	Abstract	RCT	Pancreatic ES	5-7F, 2-2.5 cm	SOD	18	18
Fazel *et al*[19], 2003	Article	RCT	ERCP	5F, 2 cm	Difficult cannulation	38	36
Harewood *et al*[20], 2005	Article	RCT	Endoscopic ampullectomy	5F, 3-5 cm	Ampullary adenoma	11	8
Sofuni *et al*[21], 2007	Article	RCT	ERCP, *etc.*	5F, 3 cm	Various	98	103
Tsuchiya *et al*[22], 2007	Article	RCT	ERCP, *etc.*	5F, 3-4 cm	Various	32	32
Ito *et al*[23], 2010	Article	RCT	ES, IDUS	5F, 4 cm	With high-risk factors	35	35
Pan *et al*[24], 2011	Article	RCT	ERCP	5F	With high-risk factors	20	20
Sofuni *et al*[25], 2011	Article	RCT	ERCP, *etc.*	5F, 3 cm	With high-risk factors	213	213
Kawaguchi *et al*[26], 2012	Article	RCT	ERCP, ES, IDUS	5F, 3 cm	With high-risk factors	60	60
Cha *et al*[27], 2012	Article	RCT	ES	5-7F, 2-2.5 cm	Difficult cannulation	46	58
Lee *et al*[28], 2012	Article	RCT	ES, IDUS, *etc.*	3, 4, 6, 8F	Difficult cannulation	50	51

RCT: Randomized controlled trial; ES: Endoscopic sphincterotomy; IDUS: Intraductal ultrasonography.

B

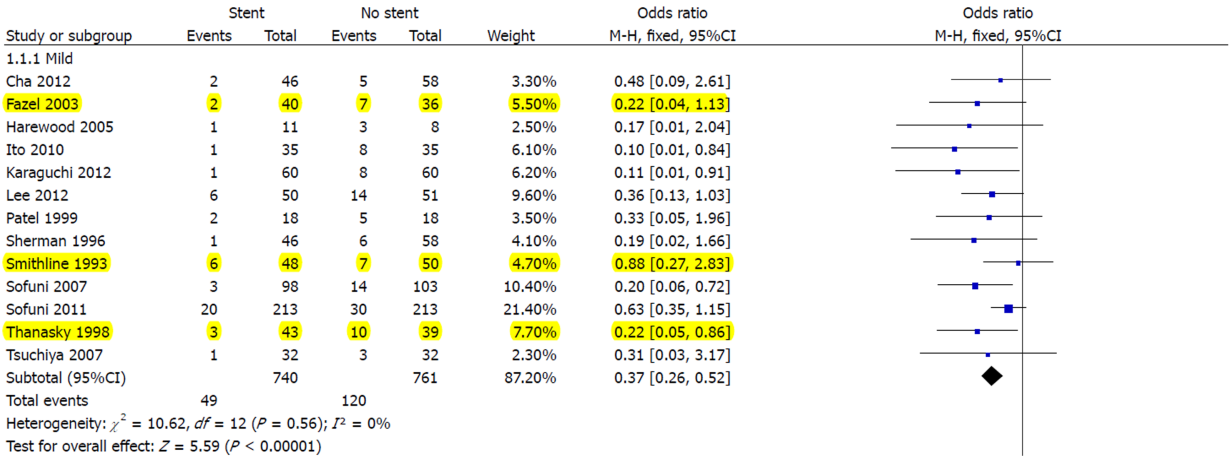

Figure 2 The highlighted data show inconsistent characteristics in the Table 1 describing the included studies and the meta-analysis in the Figure 2A. A: Characteristics of the included studies. B: The meta-analysis.

REFERENCES

1 **Fan JH**, Qian JB, Wang YM, Shi RH, Zhao CJ. Updated meta-analysis of pancreatic stent placement in preventing post-endoscopic retrograde cholangiopancreatography pancreatitis. *World J Gastroenterol* 2015; **21**: 7577-7583 [PMID: 26140006 DOI: 10.3748/wjg.v21.i24.7577]

2 **Smithline A**, Silverman W, Rogers D, Nisi R, Wiersema M, Jamidar P, Hawes R, Lehman G. Effect of prophylactic main pancreatic duct stenting on the incidence of biliary endoscopic sphincterotomy-induced pancreatitis in high-risk patients. *Gastrointest Endosc* 1993; **39**: 652-657 [PMID: 8224687 DOI: 10.1016/s0016-5107(93)70217-5]

3 **Tarnasky PR**, Palesch YY, Cunningham JT, Mauldin PD, Cotton PB, Hawes RH. Pancreatic stenting prevents pancreatitis after biliary sphincterotomy in patients with sphincter of Oddi dysfunction. *Gastroenterology* 1998; **115**: 1518-1524 [PMID: 9834280 DOI: 10.1016/s0016-5085(98)70031-9]

4 **Fazel A**, Quadri A, Catalano MF, Meyerson SM, Geenen JE. Does a pancreatic duct stent prevent post-ERCP pancreatitis? A prospective randomized study. *Gastrointest Endosc* 2003; **57**: 291-294 [PMID: 12612504 DOI: 10.1067/mge.2003.124]

Published by **Baishideng Publishing Group Inc**
7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA
Telephone: +1-925-3991568
E-mail: bpgoffice@wjgnet.com
Help Desk: https://www.f6publishing.com/helpdesk
https://www.wjgnet.com