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Radiation doses to ERCP patients are significantly lower with experienced endoscopists

To the Editor:

We read with great interest the article by Jorgensen et al¹ describing fluoroscopy time and patient radiation exposure during ERCP. As the authors report, patient radiation exposure strongly depends on fluoroscopy time, but many factors influence the actual radiation exposure. Another important issue is the radiation exposure of healthcare personnel during ERCP.² We recently studied the individual 1-year radiation exposure levels (measured by a conventional radiation dosimeter) on all members of the ERCP team. The most experienced endoscopist (performing about 150 ERCP procedures per year) received less radiation per procedure, and the ERCP fellow received the largest annual dose. It is also known that radiation exposure of the ERCP staff depends on their location with respect to the source of radiation during the procedure, and the individual receiving more radiation is the assistant located at the head of the patient (see Table 1).³

It is well-known that the large variety of radiographic devices available, the nonstandardized parameters for the use of fluoroscopy, and patient characteristics are also important factors influencing the radiation exposure to the ERCP staff. The annual radiation dose of our ERCP team may be considered low, but this may vary among endoscopy units. A precise, individual measurement of the ac-

cumulated radiation dose of each ERCP staff member is fundamental, especially for those working in endoscopy units with large ERCP volumes. While awaiting prospective trials, we should emphasize the advantages of the following: (1) having the most difficult procedures performed by the most experienced endoscopist, (2) having endoscopy fellows start their training assisted by the most experienced endoscopist, and (3) all endoscopy units having a complete record of individual patient and healthcare staff radiation doses.

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Single-balloon or short double-balloon enteroscope for ERCP in patients with surgically altered anatomies

To the Editor:

We read with interest the article by Wang et al¹ on the use of a single-balloon enteroscope for ERCP in 13 patients with surgically altered anatomies. After failed or unattemptable standard ERCPs, patients underwent endoscopic retrograde cholangiography (ERC) with a single-balloon enteroscope, resulting in diagnostic (12/13) and therapeutic (9/10) successes. Because a single-balloon enteroscope has a 200-cm working length, they used very limited variety of long accessories. We believe that the use of a short double-balloon enteroscope would solve the problem.

In patients with surgically altered anatomies, ERCP is technically challenging and often unsuccessful.²⁻⁶ With the recent advent of a balloon-assisted enteroscope, several investigators have successfully performed ERCP with a double-balloon enteroscope in such patients.⁶ Mönkemüller et al⁷ used a double-balloon enteroscope without a balloon as a single-balloon enteroscope and performed ERCP in 2 pa-

TABLE 1. Annual whole-body exposure

Staff	Experience (years)	No. of ERCPs	R mSvrt
Endoscopist 1	15	138	2.69
Endoscopist 2	9	85	2.13
Endoscopist 3	5	73	3.26
Endoscopist 4	18	22	1.58
Fellow	0	301	5.6
Nurse assistant monitoring		310	2.16
Nurse		309	1.62
Radiographer		308	0.8