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CORRESPONDENCE

FiLaC™ as a last, sphincter-preserving resort for complex perianal fistula

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Dear Sir,

We read with great interest the article by Wilhelm et al. [1] titled "5 years of experience with the FiLaC™ laser for fistula-in-ano management: long-term follow-up from a single institution", published in *Techniques in Coloproctology*. Chand et al. [2] published an interesting comment on this article, explaining that FiLaC™ is a good option in the treatment of patients with complex perianal fistula who have failed previous treatments. We strongly support this statement as it reflects our own experience with this technique.

Complex perianal fistula can be a surgical challenge when treatment is directed at sphincter preservation and avoiding fistulotomy. To overcome this problem many new sphincter-preserving techniques have been introduced in the last decade [3]. However, some complex fistulas fail to heal despite multiple and different surgical treatments over many years. In these so-called 'disaster cases', the patient is usually left with extensive perineal scarring and the remaining treatment options are often limited to chronic seton drainage or even a diverting colostomy. Therefore, there is a need for a minimally invasive treatment that can be used in patients with complex perianal fistula for whom all previous interventions have failed. Fistula-tract Laser Closure (FiLaC™), a new and promising sphincter-preserving treatment, might be a valuable treatment option in these patients.

We retrospectively analysed our own series of 'disaster cases' treated with FiLaC™ between November 2016 and December 2018 in 2 Belgian hospitals. Patients were included if they had been treated for more than 1 year, had had at least 3 previous, unsuccessful surgical interventions and were treated with FiLaC™ later. The surgical technique consisted of blind cauterization of the tract with the radial-emitting laser probe and closure of the internal orifice, as described initially by Wilhelm et al. [4].

Of the 10 patients included, 4 had multiple tracts (either distinct or side tracts). The median age of the patients was 50 years (range 30–63 years). Each patient had a history of multiple, unsuccessful surgical interventions (range 3–13). Prior treatments consisted of seton placement, fistulotomy, fistulectomy, rectal advancement flap (RAF), ligation of the intersphincteric fistula tract (LIFT), anal fistula plug and diverting colostomy. A diverting colostomy was used in 3 patients. At a median follow-up of 9 months (range 4–26 months) after the first FiLaC™ procedure, 12 out of 15 (80%) fistulas were closed (Table 1). Closure after one FiLaC™ session was achieved for 10 fistulas (67%). 5 fistulas required multiple treatments (range 2–4). In the 2 patients with Crohn's disease, only one FiLaC™ session was needed for each fistula tract and the follow-up was relatively short (range 4–9 months). 3 patients had a persistent fistula tract after one or more FiLaC™ treatments and still had follow-up by December 31, 2018. Although the fistula persisted eventually in these patients, a temporary but significant improvement of symptoms was noted after each FiLaC™ session.

FiLaC™ has some clear advantages compared to other sphincter-preserving techniques. The technique is easy to perform, operating time is short, no open wounds are created and limited postoperative care is necessary. The procedure can therefore be easily repeated. Not a single case of postoperative flatal or fecal incontinence is reported in the recent literature [5, 6]. This makes FiLaC™ an attractive alternative to repetitive complex and invasive surgery in patients with complex perianal fistula. The primary healing rate of FiLaC™ for simple perianal fistulas is comparable with that of other sphincter-preserving techniques and ranges 65–80% [3]. However, FiLaC™ has been proven to have a high secondary healing rate. In a recent study with 117 patients by

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Table 1 Case series, clinical outcome

Patient	Fistula tracts (location of EO)	Fistula type	FiLaC™ treatments (*n*)	Result	Follow-up after first FiLaC™ (months)	Total follow-up (months)
1	Left lateral	Trans	3	Persistence	18	31
	Midline posterior	Inter	1	Closure		
2	Right lateral	Trans	2	Persistence	15	23
3	Left anterolateral	Trans	1	Closure	9	23
4	Midline anterior	Inter	2	Closure	9	21
5	Right posterolateral	Trans	1	Closure	5	12
6	Midline anterior	Trans	1	Closure	9	Unknown
	Left posterolateral	Trans	1	Closure		
	Midline posterior	Trans	1	Closure		
7	Midline posterior	Trans	4	Persistence	15	Unknown
	Left posterolateral	Trans	1	Closure		
8	Left anterolateral	Inter	1	Closure	4	Unknown
9	Midline posterior	Trans	2	Closure	26	45
	Right lateral	Trans	1	Closure		
10	Midline posterior	Trans	1	Closure	8	55

N number, *EO* external orifice, *trans* transsphincteric, *inter* intersphincteric

Wilhelm et al. [1], the secondary healing rate was 88% at a median follow-up of 25 months (range 6–60) months. In our small series of 10 patients and 15 fistulas there was a primary healing rate of 67% and a secondary healing rate of 80%. Even if the fistula had not healed completely after a FiLaC™ session, a temporary but significant improvement of symptoms was noted. Since each patient had a long history of multiple failed surgical attempts, these results can be interpreted as relatively good. Interestingly, the 2 patients with Crohn's disease both healed. This may be explained by the use of concomitant medical therapy for Crohn's disease, which may positively influence fistula healing when combined with surgery [7].

In conclusion, FiLaC™ seems a good option in the management of complex perianal fistula: the technique is simple, avoids scarring caused by extensive dissection and can therefore be easily repeated. The observed healing rate after one or more FiLaC™ sessions is promising. However, larger studies in trial setting are needed to further assess the value of FiLaC™ in these patients.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent Due to the retrospective nature of the study, patient consent was waived by the local ethical committees.

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