



Anal fistulas are not all the same

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Anal fistula treatment is associated with a great deal of controversy. The surgeon's armamentarium is vast and treatment options for success can be like searching for the holy grail. In this issue, Sluckin et al. [1] have shown data from the use of laser treatment for anal fistula and demonstrated that the healing rate after laser surgery is similar to that of a mucosal advancement flap (MAF) or ligation of the intersphincteric tract (LIFT). In their series, the healing rate for laser was 55.6 vs 58.7% for MAF/LIFT. The authors state that this is an acceptable procedure for fistula surgery, but the fundamental message in this article is that there is no one sphincter sparing operation that will cure all fistulas. We should consider why this is so and perhaps change the paradigm of thinking when it comes to fistula surgery. One should adopt an individualized approach, the best approach for a particular patient, considering factors, such as patients' demographics, their disease type, their fistula morphology and their quality of life.

To achieve this approach, there are several issues that need to be considered. Just like an electrician has a toolbox with multiple tools we as surgeons have a toolbox for fistula treatment. A toolbox does not give us the one size fits all approach, but instead gives us the opportunity to treat the right patient with the right procedure. To determine what the correct procedure is one needs to accept that fistulas are complex. It is important to understand the anatomy, the number of tracts, epithelialisation, presence of inflammation, the size of the internal opening and the diameter of the tract. Many of these features are not described in the literature and this makes determining the right tool for the right job difficult.

It is well-known that laying open anal fistulas is the gold standard for achieving cure, but the potential risk of

incontinence drives surgeons and patients away from using laying open as the first option. Laser surgery functions by destroying the fistula tract with a 360° approach [2]. Sluckin et al. appear to follow the process that involves use of a seton in the first instance followed by a definitive procedure. This is certainly the currently accepted approach for minimally invasive fistula treatments. The theory is based on the premise that the tract diameter will be reduced after insertion of the seton. The diameter of the tract through which the laser emits the energy is approximately 4–5 mm, and while this concept works very well in theory, in practice, the best approach would be to make a judgement on the diameter. In our opinion, an even smaller tract diameter may be more beneficial in laser procedures. The manufacturer makes one size of laser diode and intuitively the nearer the diode to the fistula wall the better the chance of being able to close the wall circumferentially; though, this statement is not based on any evidence.

Nonetheless, there are several other factors that may increase the difficulty of treating a fistula successfully. Most of the literature does not define the fistula anatomy in detail. The Parks classification which is commonly used defines the pathway of the tract, but does not add any extra detail such as the number of tracts. Sluckin's paper shows that the Parks 1 (intersphincteric fistula) has the best healing rate with laser but with MAF and LIFT Parks 2 has a better healing rate. The Parks classification is certainly important in determining minimally invasive procedures, but other factors also play an important role. If the number of tracts are not addressed prior to any minimally invasive surgery then it is unlikely the fistula will heal. In this study, the length of the fistula was directly associated with a reduced healing rate, but this argument is not always supported in the literature [2, 3]. The use of procedures such as video-assisted fistula treatment (VAAFT) can have the benefit of downsizing the fistula tract and healing secondary tracts in a staged approach.

There is an assumption that it is the internal opening that drives the inability to heal but this again is not a proven fact. In this regard, the concept of high and low pressure zones

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may be important. A large internal opening can theoretically allow the seepage of liquid from the anal canal to the fistula tract and this would be based on the high pressure in the anal canal. The reverse, however, may be true if the internal opening is small. This again is a very difficult point to consider, but there are proponents of internal opening closure as well as those who argue that it is not necessary.

The ultimate goal in any fistula treatment is to heal the fistula without negatively affecting an individual's quality of life. As this is the main foundation for minimally invasive procedures any study that analyses this should consider the quality of life as well. The laser procedure is not associated with any fecal incontinence and repeating the procedure in some circumstances can also improve the healing rate [2]. The most important factor is to choose the right procedure for the right patient. Many of these minimally invasive procedures also have the effect of downsizing fistulas to the point where laying them open may not have any long-term consequences. Most of the currently available tools have a 50% success rate but this could be related to the fact that we use the wrong tool for some patients. On this basis, our approach should be to open the toolbox and use the correct tool. At the end of the day, anal fistulas are not all the same.

Declarations

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

Ethical approval This article does not contain any studies with human participants or animals performed by any of the authors.

Informed consent For this type of study formal consent is not required.

References

1. Sluckin TC, Gispen WH, Jongenotter J, Hazen SJA, Smeets S, van der Bilt JDW, Smeenk RM, Schouten R (2022) Treatment of cryptoglandular fistulas with the fistula tract laser closure (FiLaC™) method in comparison with standard methods: first results of a multicenter retrospective comparative study in the Netherlands. *Tech Coloproctol*. <https://doi.org/10.1007/s10151-022-02644-7>
2. Giamundo P, De Angelis M (2021) Treatment of anal fistula with FiLaC®: results of a 10-year experience with 175 patients. *Tech Coloproctol* 25(8):941–948
3. Adegbola SO, Sahnun K, Tozer P, Warusavitarne J (2021) Emerging data on fistula laser closure (FiLaC) for the treatment of perianal fistulas; patient selection and outcomes. *Clin Exp Gastroenterol* 14:467–475

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