Smoking cessation strategies in Crohn's disease

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Summary

Although smoking cessation is one of the most effective interventions in patients with Crohn's disease, the prevalence of smoking in these patients is higher than in the general population, and much higher than in patients with other smoking-related diseases. There is a lack of awareness of the benefits of cessation among patients and general practitioners, and a lack of engagement in smoking cessation by specialists. This article discusses the strategies that practitioners can use to motivate patients to quit and how the success of a quitting attempt can be maximised.

Principles of supporting smoking cessation

Surveys consistently show that most smokers want to stop, often for health reasons, and that about half plan to quit within the next year.¹ Research has increased our understanding of how smokers decide to stop, and has confirmed the effectiveness of drugs for nicotine addiction and of services to support cessation.

Deciding to stop smoking

Perhaps unsurprisingly, smokers decide to quit in a variety of ways. In a large survey of UK smokers who had made a recent attempt to quit, almost half (48.6%) reported that this was unplanned, and half said that they had planned it in advance, usually a few days or weeks ahead. These planned attempts to quit support the 'stages of change' model, which proposes that smokers progress through precontemplation (not thinking about stopping), contemplation, planning to quit and taking action, leading to either maintenance or relapse, in which case the cycle repeats itself.² However, the finding that so many attempts to quit are unplanned has led to another theory, based on catastrophe theory, in which a small 'trigger' can cause smokers to quit if they are already primed to do so, described as being in a state of 'motivational tension'.³

An awareness of these theories helps health professionals to be more effective in assisting their patients to stop. The stages

of change model maps onto what has been described as the '5 As' approach (ask, assess, advise, assist, arrange), as incorporated in National Institute for Health and Clinical Excellence (NICE) guidelines for brief interventions, see figure 1.⁴ This suggests that routine contacts should be used to 'ask' all smokers about their habit, 'assess' their motivation, 'advise' them to quit, and if they agree, to 'assist' them in planning and implementing an attempt to quit by 'arranging' continuing support, including the offer of nicotine addiction treatment and behavioural support. To maximise the effectiveness of this approach, it is important for health professionals to record smoking status and motivation to quit.⁵ Clinicians can assess motivation by two simple questions: 'do you want to stop smoking for good' and 'are you interested in making an attempt to quit in the near future'.⁶

Health professionals also have a role in supporting smokers who stop in an unplanned way by encouraging motivational tension through discussion of the risk of smoking and benefits of cessation, alerting them to health-related triggers for a quit attempt, and offering immediate treatment (drugs and behavioural support), the so-called 3T model (tension, trigger, treat).³

Succeeding in quitting

Whether or not an attempt to quit is planned, its success depends less on motivation than the extent of the smoker's dependence on nicotine.⁶ Both drugs and behavioural support are effective in overcoming this.

Drugs to assist smoking cessation include nicotine replacement therapy (NRT), bupropion and varenicline. Their effect on cessation rates is shown in table 1. The strongest evidence base is for NRT, which is available on prescription and over the counter as chewing gum, transdermal patches, nasal spray, inhalers and tablets/lozenges. A recent Cochrane review found that the relative risk (RR) of abstinence for any form of NRT relative to control was 1.58 (95% CI 1.50 to 1.66).⁷ No one formulation was more effective, but there was some evidence that combining a slow

Figure 1 National Institute for Health and Clinical Excellence guidelines for brief interventions for smokers. Reproduced from the National Institute for Health and Clinical Excellence.⁴

Table 1 Summary of Cochrane reviews of effectiveness of drugs and behavioural support in smoking cessation

Intervention	RR of cessation	95% CI
Nicotine replacement therapy vs placebo ⁷	1.58	1.50 to 1.66
Bupropion vs placebo ⁸	1.69	1.53 to 1.85
Varenicline vs placebo ⁹	1.52	1.27 to 1.81
Behavioural support vs brief advice ¹¹	1.39	1.24 to 1.57

delivery mechanism (ie, patch) with a faster-acting formulation—for example, gum, to deal with urges to smoke increased success rates, and this approach is increasingly used in clinical practice.

Bupropion is an atypical antidepressant, licensed in the UK for smoking cessation since 2000. It is more effective than placebo (RR=1.69; 95% CI 1.53 to 1.85) but a meta-analysis of three trials comparing its effectiveness with NRT found no significant difference in sustained abstinence (RR=1.26; 95% CI 0.73 to 2.18).⁸

Varenicline is a nicotine receptor partial agonist, available on National Health Service prescription since

2007. It is more effective than placebo (RR=1.52; 95% CI 1.27 to 1.81) and has been shown to be more effective in head-to-head trials with both bupropion and NRT.⁹ The Cochrane review also included estimates of the number needed to treat to achieve sustained abstinence from smoking at 12 months. For varenicline, this was 10 (95% CI 7 to 14), for bupropion, 18 (95% CI 14 to 23) and for NRT, 23 (95% CI 20 to 27). This finding, together with later evidence of the superiority of varenicline, has led to calls for it to be the drug of first choice in smoking cessation.¹⁰

The success of an attempt to quit is also significantly enhanced by behavioural support. Compared with brief advice from a practitioner in a routine consultation, more intensive support from a trained advisor in sessions dedicated to support cessation increases the chance of quitting by about 40%, (RR=1.39; 95% CI 1.24 to 1.57).¹¹ Typically, support includes review of motivation, identifying situations associated with risk of relapse and problem-solving strategies. There is no clear evidence as to whether individual or group sessions are more effective,¹² and further research is needed to establish the most cost-effective number and duration of support sessions.

The benefits of drugs and behavioural support are multiplicative, as recognised in NICE guidelines that motivated smokers should be offered both.⁴ In the UK, this approach was implemented in 1999 by the establishment of comprehensive stop smoking services. These offer regular individual or group meetings with a trained adviser using structured behavioural therapy, usually combined with nicotine addiction treatment. A systematic review of the evaluations of these services found that 53% of smokers attending the service succeed in quitting at 4 weeks, and that 15% are still not smoking at 12 months.¹³

Smoking cessation and Crohn's disease

Smoking cessation is as effective as immunotherapy in managing Crohn's disease,¹⁴ but appears to be under-used as a management strategy in primary and secondary care. A small UK survey of patients with Crohn's disease attending a hospital clinic, published in 1996, identified 41 current smokers. Of these, only 11 reported being aware of the effect of smoking on their condition, 15 said they had never been advised to quit by their hospital doctor and 27 that they had never been asked to quit by their general practitioner (GP).¹⁵ The same study found that very few GPs were aware of the link between smoking and Crohn's disease, and others have suggested that gastroenterologists may not feel skilled in advising about smoking.¹⁴ A more detailed survey, conducted in Canada, found that patients with Crohn's disease were more likely than the general population to smoke, but that they were no more refractory to smoking cessation, in terms of addiction to nicotine and their motivation to quit.¹⁶

Much has changed since the UK survey was published. As outlined above, we understand more about how smokers decide to quit, effective drugs to support cessation are available on prescription and stop smoking services are in place. There is also more evidence of the impact of health events to act as motivational triggers; a recent review found that patients diagnosed with smoking-related conditions, including heart attack, stroke, chronic obstructive pulmonary disease and lung cancer, can achieve sustained rates of quitting of between 40% and 70%.¹⁷ Additionally, we know that discussion of smoking is more acceptable to both patients and practitioners in consultations about smoking-related conditions.¹⁸

Health professionals managing patients with Crohn's disease are well placed to take advantage of these developments, by ensuring that patients are aware of the benefits of smoking cessation for slowing disease progression, by assessing and building on motivation to quit, and by encouraging the use of drugs and services to support an attempt to quit. Negotiation is needed to identify support for each patient; some will want to defer an attempt to quit until support from cessation services is in place, others will want immediate treatment, with or without support from cessation services.¹⁹ Using this approach, there are no theoretical or

practical reasons why smoking rates in patients with Crohn's disease cannot be reduced to levels associated with other chronic conditions related to smoking.

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