Inpatient or Residential Treatment for Smokers with Tobacco Dependence

Il ricovero ospedaliero nella terapia del tabagismo

Richard D. Hurt, Ivana T. Croghan

In recent years, tobacco dependence is receiving more attention for the severe medical problems that it causes but also as the severe addiction that it is. This has led physicians and health care professionals to more aggressively treat smokers with combinations of medications and more intensive behavioral counseling. Inpatient or residential treatment programs, the most intensive treatment available for patients with tobacco dependence, are available in a few medical centers[1]. Most recently, Swedish researchers reported on their success of treating smokers with COPD in a hospital-based program[2].

Health care practitioners are often faced with the dilemma of the smoker who has not been able to stop smoking despite counseling and pharmacotherapy.

The only option available in most medical centers is to "recycle" the patient through similar treatments. As the smoking prevalence declines, as a result of public health policies such as smoke-free workplaces and increased taxes, the remaining smokers will likely have higher levels of tobacco dependence.

Thus, residential or inpatient treatment programs will be needed to treat these smokers, many of whom will have serious life or limb threatening tobacco caused medical problems. Two such long-standing treatment programs are available in the United States, one at the Mayo Clinic in Rochester, Minnesota, (http://ndc.mayo.edu) and the other at St. Helena Hospital in California (www.smokefreelife.com). These two programs are based on a medical model for the treatment of tobacco dependence that has been used to successfully treat alcoholism and other addictions. It is well recognized that the intensity of treatment for tobacco dependence is an important factor. The 2008 US Public Health Service Guideline acknowledges that there is a dose response for behavioral interventions.

From left: Hurt, Croghan and Fagerström

Components of these two multifaceted and comprehensive programs are similar. The program at the Mayo Clinic is 8 days long where the patients are admitted on a Friday and dismissed on the following Friday while the St. Helena program is 7 days in length.

There are frequent one-to-one counseling sessions as well as group sessions where counseling also occurs. The group dynamics themselves offer ways for smokers to gain insight to their tobacco dependence and to develop plans to remain smoke-free. In addition, there are a large number of educational sessions including the medical aspects of smoking, the neurobiology of tobacco dependence, diet and exercise, stress management, and relapse prevention to name a few. Because the program is overseen by a


Rochester, Minnesota (USA): Mayo Clinic

physician who makes daily rounds on the patients, the pharmacotherapy can be tailored to the individual needs of the patient.

We utilize serum cotinine concentrations to not only gauge the level of tobacco dependence of the individual but also use it to tailor the pharmacotherapy, especially if we are using nicotine replacement therapy. Combination pharmacotherapy is the rule, and we frequently use higher than standard dose nicotine patch therapy[3]. We use nicotine patch therapy, bupropion, and/or varenicline as the base medication and use short acting nicotine replacement therapy (nicotine gum, lozenges, nasal spray and/or vapor inhaler) for ad lib use to control withdrawal symptoms and urges to smoke. Finally, the program is provided in a smoke-free, tobacco-free milieu which provides a protected environment and allows for the interventions to take place free of the usual triggers or cues to smoke.

Residential or inpatient treatment offers the best treatment outcome available. One year smoking abstinence rates were comparable with the Swedish experience showing 52% of patients were abstinent from smoking at one year and the Mayo program shows smoking abstinence rates of 45% at one year. The analysis of the Mayo program showed that patients admitted in the more recent time frame had better outcomes than those admitted earlier[1]. This is thought to represent continued modification of the program based on new evidence-based techniques but also that more medications have become available.

Further, we are using combination pharmacotherapy more often now than we did 15 years ago. It also should be noted that patients admitted for residential treatment are usually a bit older than the average smoker with an average age of 53 years, 80% have a tobacco caused disease, and over a third are recovering from other addictions. Thus, long term success rates approaching 50% in this group of patients is quite acceptable. Finally, the cost effectiveness analysis of the residential program at Mayo Clinic shows it to be highly cost effective[4]. Therefore, residential treatment should be seriously considered for patients who have tobacco dependence who are unable to stop smoking using conventional treatments and for any patient with limb or life threatening medical problems who urgently need the most effective treatment available. ■

Richard D. Hurt
Director of The Nicotine Dependence Center, Mayo Clinic - Rochester (USA)
Ivana T. Croghan
Nicotine Research Program, Mayo Clinic - Rochester (USA)

Bibliografia

1. Hays JT, Wolter TD, Eberman KM, Croghan IT, Offord KP, Hurt RD. Residential (inpatient) treatment compared with outpatient treatment for nicotine dependence. Mayo Clinic Proceedings. 2001;76:124-133.
2. Sundblad BM, Larsson K, Nathell L. High rate of smoking abstinence in COPD patients: Smoking cessation by hospitalization. Nicotine Tob Res. 2008;10:883-890.
3. Ebbert JO, Sood A, Hays JT, Dale LC, Hurt RD. Treating tobacco dependence: review of the best and latest treatment options. J Thorac Oncol. 2007;2:249-256.
4. Croghan IT, Offord KP, Evans RW, et al. Cost-effectiveness of treating nicotine dependence: the Mayo Clinic experience. Mayo Clinic Proceedings. 1997;72:917-924.