Patient Perceptions and Willingness to Stop Smoking Prior to Foot and Ankle Surgery

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Disclosures

- **Title**
  - Patient Perceptions and Willingness to Stop Smoking Prior to Foot and Ankle Surgery

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Background

- Estimated 1.3 billion smokers in the world\(^1\)
- Approx. 42.1 million in the US (18% of population)\(^2\)
- Leading cause of preventable death in the US\(^3\)
- Much of population is unaware of the effects smoking has on cardiovascular health\(^4\)
- Even fewer are aware of effects on bone healing and wound healing\(^5\)

F&A Risk

- Smokers 6 times more likely to develop infection after foot and ankle surgery\(^6\)
- Bone healing delayed after bunion surgery in smokers\(^7\)
- Risk of developing nonunion 3 times higher in smokers undergoing hindfoot fusions\(^8\)
Smoking Cessation

- Meta-analysis consisting of RCT found that preoperative smoking cessation reduced risk of complications by 41%\(^\text{12}\)

- Difficult – only 4% to 7% of smokers able to quit without medication or other help\(^\text{9}\)

- Relapse at 6 months \(\sim 80\%\)^\(^\text{10}\)

- Nicotine replacements and other medications can increase quit rate to 25\%^\(^\text{9}\)

- Addition of smoking cessation aids with doctor’s advice increases likelihood of success (self-help hotline, internet resources, and access to NRT\(^\text{11}\))
Study Goals

- Determine patient awareness of smoking’s effects on orthopaedics
- Determine patient willingness to quit smoking before foot/ankle surgery
Methods

- Over a 6-month period, new foot/ankle patients who reported cigarette usage were given a short, 5-question survey.

- Prior to the survey, a brief explanation of the deleterious effects of smoking on bone, soft-tissue, and wound healing was given.

- Additional information was gathered on years of smoking and number of cigarettes smoked per day.
Survey

1. Prior to reading this information, were you aware that smoking can slow bone and soft-tissue healing and can lead to poorer results?

2. Knowing this information, are you more likely to attempt to stop smoking to aid in the healing of your foot or ankle condition?

3. If surgery is not required for your condition, would you be agreeable to a supervised smoking cessation program?

4. If surgery is indicated for your condition, would you be agreeable to starting a supervised smoking cessation program before surgery?

5. Would you be willing to undergo a smoking cessation program if you knew that your surgery would be postponed until you did?
Results

1. Prior to reading this information, were you aware that smoking can slow bone and soft-tissue healing and can lead to poorer results?

44% (104/237) were unaware of the effects of smoking on bone and wound healing

2. Knowing this information, are you more likely to attempt to stop smoking to aid in the healing of your foot or ankle condition?

82% (195/237) more likely to participate in a supervised smoking cessation program after receiving this information
Results

3. If *surgery is not required* for your condition, would you be agreeable to a supervised smoking cessation program?

   64% (124/195) interested in smoking cessation even if surgery not required

4. If *surgery is indicated* for your condition, would you be agreeable to starting a supervised smoking cessation program before surgery.

   86% (168/195) interested in smoking cessation if surgery required

5. Would you be willing to undergo a smoking cessation program if you knew that your surgery would be postponed until you did?

   96% (188/195) interested in smoking cessation if surgery would be delayed until they stopped smoking
Results

- 237 patients completed the survey
- Average cigarettes smoked per day -- 14 (1-50)
- Average years smoked -- 22 (0.4 – 60)
- 18% (42/237) of the patients indicated that they were not interested in smoking cessation

Limitations

- No follow-up to determine if smoking education was effective in changing future behavior
- No demographics collected so the surveyed population may not accurately represent the average patient population
- Prior orthopedics visits and smoking cessation teaching unknown
Conclusions

- Nearly half of foot and ankle patients were unaware of the effects of smoking on soft-tissue and bone healing.

- Most expressed interest in being involved in a supervised smoking cessation program when they learned of these effects.

- Short discussion, cessation hotline, and referral to primary care provider takes little time and could have significant positive effects.
References