The Practical Application of Multimedia Technology to Facilitate the Education and Treatment of Patients with Plantar Fasciitis: A Pilot Study

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Precis/Summary:
The aim of this study was to evaluate the efficacy of a computer based multimedia patient education module when incorporated into the standard treatment protocol for patients diagnosed with plantar fasciitis.

Abstract:
Aim: The aim of this study was to evaluate the efficacy of a computer based multimedia patient education module when incorporated into the standard treatment protocol for patients diagnosed with plantar fasciitis.

Methods: A multimedia patient education module was developed about the natural history and evidence-based treatment of plantar fasciitis. Questionnaires were developed to assess patient understanding and satisfaction with the information to be delivered by the surgeon and the multimedia module. Patients diagnosed with plantar fasciitis were provided with an established, standardized discourse delivered by the surgeon. Patient understanding and satisfaction following this method of information delivery were assessed by questionnaire. Patients then viewed the multimedia education module following which patient understanding and satisfaction were again assessed by questionnaire. Statistical analysis was performed to determine the effect of the multimedia module.

Results: Forty-one patients consented to participate in the study. After a standardized surgeon-directed education about plantar fasciitis, patients achieved an average score of 5.8 out of a possible 9 correct answers on the questionnaire. Sixty-eight percent of patients reported they felt well informed about plantar fasciitis. Patients rated the ease of understanding, of the information delivered by the surgeon at 7.6 on a 10 cm visual analogue scale (VAS). After viewing the multimedia module patients on average scored 7.8 on the knowledge questionnaire. This was a significant improvement (p<0.00001) over the surgeon lead education alone. After viewing the module 95 percent of patients reported they felt well informed about plantar fasciitis. The ease of understanding of the information delivered by the module was rated as 9.0 on a VAS. Again this was a significantly better (p<0.005) than what patients had rated the information discussed with the surgeon. Sixty-eight percent of responding patients indicated that they believed the multimedia module to provide a better educational experience than a thorough, standardized discussion with their surgeon. Twenty-four percent preferred the surgeon and 8 percent found both to be equal. No patient reported confusion with the format or content of the module.

Conclusion: The multimedia module was found to be a useful adjunct to educate patients about the nature and treatment of plantar fasciitis when incorporated into clinical practice. Multimedia technology has potential to enhance patient satisfaction with the quality of information delivery provided by their surgeon. Further investigation is warranted.