

Preliminary observation of treatment of chronic bronchitis and bronchial asthma with laser

Liu Pingyi, Xing Simin, Pan Junying, Fu Chengkai

(People's Hospital of Beijing Medical College)

Since July 1978, we have treated 58 cases of chronic bronchitis and bronchial asthma with laser generating from the He-Ne laser instrument through certain acupuncture points of the body. Among the 58 cases studied, 29 cases suffered from asthmatic bronchitis, 25 bronchial asthma and 4 chronic bronchitis. The state of the patients before laser treatment were compared as pretreatment controls. The same bronchiolytic and antibacterial agents were used prior to and during the laser treatment. No steroid was used. The acupuncture points chosen were Tian-Tu and Ding-Chuan. Occasionally, acupuncture points Shan-Zhong and Fei Shu were added simultaneously. The patients were subjected to laser treatment four times a week, and each time lasted 5 minutes. Eight times of treatments were taken as a course. The results obtained after 2 courses of treatment were: 10.3% markedly improved, 58.6% improved and 31.1% no improvement. The total percentage of improvement was 68.9%. The improvement was apparently better in asthma, being 68.1%. No obvious relationship was noted between the severity of disease and effectiveness of treatment. Patients under 30 years old showed remarkable improvement, being 90.0%. Asthmatic symptoms were relieved in 77.6% of cases. There was no marked change in temperature, respiratory rate or rales in the lungs. Nevertheless, in 58.8% of cases, a decrease in pulse rate by 4 beats/min. ($U_1=31.35$) were noted. Asthmatic wheezing was found to be reduced ($U_1=7.8$) in 52.9% of cases. Laboratory examination including blood picture, ESR, blood gas analysis, humoral immunity, hepatic and renal functions showed no remarkable changes after laser treatment. Although the examination of the pulmonary ventilation revealed no change of vital capacity and time vital capacity, yet, maximal mid-flow (MMF) showed significant improvement. In 46.7% of patients and improvement by more than 10% were noted ($U_1=7.25$). Apart from mild transient dizziness and palpitation in a few patients, no untoward reactions were noted.

The results showed that laser acting on certain acupuncture points may relieve the asthmatic attack and improve ventilation of patients with chronic bronchitis, asthmatic bronchitis and bronchial asthma. We consider that the physical effects of laser including heat, light and pressure effect exerted on the acupuncture points and channels might play a modulating effect on the human body. Further studies still need to be done.

激光治疗慢性支气管炎及支气管哮喘的临床观察

刘娉仪 邢思敏 潘俊英 傅正凯

(北京医学院附属人民医院)

我院于 1978 年 7 月中旬开始使用氩-氟激光治疗仪穴位照射治疗慢性支气管炎及支气管哮喘共 58 例。其中单纯型慢性支气管炎 4 例，喘息性支气管炎 29 例，支气管哮喘 25 例。

在原有对症治疗及发作时使用抗菌素的基础上，加用激光穴位照射。采用天突、定喘穴，个别加照膻中或肺俞，每穴照射五分钟，每周照射四次，八次为一疗程。治疗两疗程后之近期疗效，显效占 10.3%，好转 58.6%，无效 31.1%，总有效率为 68.9%。分析近期疗效与病种的关系，以支气管哮喘的疗效最好，有效率为 68.1%。轻型与重型的疗效无明显区别。在年龄方面以 30 岁以下的一组患者效果最好，其有效率为 90.9%。在症状缓解方面以喘的好转率最高，为 77.6%。在客观检查方面，激光治疗前后血气分析、体液免疫功能、肝肾功能、周围血象、血沉、体温、呼吸、肺部干性及湿性罗音均无明显之改变。但有 58.8% 的患者脉率下降在每分钟 4 次以上($U_1=31.35$)，有 52.9% 的患者肺部哮鸣音减少($U_1=7.8$)。在通气功能检查方面，肺活量及时间肺活量于治疗前后无明显变化，但最大呼气中期流速(MMF)则有明显的改善，MMF 较治疗前增加 10% 以上者占 46.7%($U_1=7.25$)。58 例患者除个别有头晕心慌外，余均无明显之副作用。

根据上述临床分析所见，激光穴位照射对慢性气管炎支气管哮喘患者的喘息发作有缓解作用，对通气功能有所改善。我们初步认为可能系激光的光、热、压强效应通过穴位经络对机体产生调节的结果。这是初步设想，尚有待进一步探讨。