

**Methods:** Six kinds of CIM were used on the depilated abdomens of rats. Images were observed and analyzed by using Hematoxylin&Eosin(H&E) staining and TUNEL assays.

**Results:** Moxibustion medical treatment using CIM could generate first to third degree burns. In some cases, no burns were generated. We used H-E staining to observe second-degree and third-degree burns and TUNEL assays to observe first-degree burns. In first-degree burns, the TUNEL reaction in the epidermal layer was confirmed. The damage to the dermal layer was observed in more than second-degree burn. In third-degree burns, tissue degeneration to the subcutaneous fat was observed, but the thickness of the skin tissue was not observed.

**Conclusions:** Basic data classifying the burns generated by CIM treatment through histological observation of the burn tissue caused by the CIM treatment were obtained in this research.

**Key words:** commercial indirect moxa; burn; thermal injury; histology; skin

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## Review of Stimulating Technologies of Acupuncture Points in Patients

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### Abstract

**Objectives:** This study estimated the antioxidant effects of the moxi with ginger tar (MGT), i.e., the chemical combustion products produced by moxibustion with ginger during combustion.

**Methods:** We investigated the total polyphenol and flavonoid contents, the SOD (superoxide dismutase) scavenging activity, and the ABTS (2,2-azino-bis-3-ethylbenzo-thiazoline-6-sulfonic acid) & DPPH (2,2-diphenyl-1-picryl-hydrazyl) radical's scavenging ability of MGT.

**Results:** The total polyphenol content of MGT was  $7.8 \pm 0.09$  mg/g in 10 mg/ml, the SOD activity was  $42.51 \pm 3.39\%$  in 200 ug/ml, the DPPH radical scavenging effect of MGT was  $83.24 \pm 0.01\%$  in 200 ug/ml and the ABTS radical scavenging effect was  $41.88 \pm 0.16\%$  in 200 ug/ml.

**Conclusions:** In this study, the effects of moxi with ginger could be induced by not only heating stimuli on acupoints but also chemical stimuli produced during combustion of moxibustion. An advanced study of the biological mechanism of moxibustion with MGT based on the meridian and considering skin aging and inflammation will be required.

**Key Words:** moxi with ginger slice; MGT; antioxidant effects

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## Effects of Glycyrrhizae Radix Pharmacopuncture Intravenous Injection on Ischemia-induced Acute Renal Failure in Rabbits

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### Abstract

**Objectives:** The present study was undertaken to determine whether Glycyrrhizae Radix pharmacopuncture intravenous injection exerts a beneficial effect against ischemia-induced acute renal failure in rabbits.

**Methods:** Rabbits were treated with Glycyrrhizae Radix pharmacopuncture via i.v., followed by renal ischemia/reperfusion. The fractional excretions of glucose and phosphate were measured; the malondialdehyde content was also determined. The morphological changes of the cortical part of the kidney were observed with a light microscope.

**Results:** Renal ischemia/reperfusion caused increased fractional excretions of glucose and phosphate in ischemia-induced animals, which was prevented by Radix Glycyrrhizae extract treatment. Ischemia/reperfusion increased lipid peroxidation, which was prevented by Radix Glycyrrhizae pharmacopuncture administration. Morphological changes were also altered.

**Conclusions:** These results indicate that lipid peroxidation plays a critical role in ischemia-induced acute renal failure and that Glycyrrhizae Radix pharmacopuncture exerts a protective effect against acute renal failure induced by renal ischemia/reperfusion.

**Key Words:** Glycyrrhizae Radix; pharmacopuncture; ischemia; renal failure

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