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We Needs to Look More into Possible Benefits of Fenugreek for Bone Health: A Short Commentary

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SHORT COMMENTARY

Fenugreek seed extracts may have promising physiological and pharmacological benefits in both human and animal species. The aim of this brief discussion is to highlight the potential importance of Fenugreek's physiological and pharmacological features.

In regards to the recent publication by Aldhilan et al.[1] entitled "The Healing Callus-Promoting Effect of Fenugreek in a Humerus Shaft Fracture:A Case Report" published in Cureus.

Fenugreek has been known since ancient times. Long back in Egypt, they used fenugreek to embalm mummies. Romans and Greeks for cattle fodder. In other countries, they use it to enhance urine contraction to facilitate labor. Some use it to reduce edema. It had many different components, such as carbohydrates, fibers, portions, alkaloids, flavonoids, free amino acids, calcium, saponins, vitamins, cholesterol, and many others.[2] Other uses of Fenugreek include reducing blood glucose, increasing sexual desire, and having many other health benefits.

In the Kingdom of Saudi Arabia, it is widely known that fenugreek enhances fracture healing. Patients usually consume it without medical advice. Although the side effects of Fenugreek are well known in the literature, we are unaware of reported cases of side effects in our locality. However, one of the side effects of Fenukreek is its smell, which is due to sotalone; a compound that, at low concentrations has a distinct maple syrup-like odor that may make a double-blind randomized clinical trial almost impossible, as the fenukreek smell will be recognized by physicians as well as patients.

Several elements influence the process of bone fracture healing instead of a single component dominating it. Among others, fracture alignments, blood flow, and nutritional considerations are the most crucial factors. Fenugreek does not possess magical properties as a remedy, although it may provide assistance for the healing of fractures. Fenugreek has positive effects on bone

mineralization as it enhances the load of calcium within osteoblasts, stimulates alkaline phosphatase, enhances BMP upregulation, and acts as an osteoclast inhibitor [4].

Several papers highlighted the various advantages of Fenugreek in several domains.

Empirical studies as well as systematic reviews have shown the preventive and therapeutic properties of fenugreek, including its anti-carcinogenic effects. A meta-analysis on the impact of fenugreek on muscular performance proved that fenugreek supplementation results in improved muscular strength and endurance, reduces body fat, increases lean body mass, and accelerates glycogen resynthesis during the post-exercise recovery phase [3]. The authors cited a range of doses, specifically 300–900 mg/day, from various studies.

Fenugreek has a strong antiosteoporosis effect, which makes it beneficial for post-menoporosis osteoporosis. Apart from osteoporosis, osteoclasts play a pivotal role as bone eaters in a lot of inflammatory diseases associated with osteolysis [5] . So, well-planned randomized clinical trials are needed to study the effects of Fenugreek on fracture healing as well as inflammatory diseases.

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Conflicts of interest

None

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Mansour Aldhilan.

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