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## Role of platelet rich plasma in repairing of non healing wounds and bones in clinical setup

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PRP stands for Platelet Rich Plasma, which is a main component of a PRP stem cell injection. In the last few decades, thousands of patients have benefited from platelet rich plasma (PRP) therapies, emerging as a safe alternative in many different medical fields. The term is used very loosely to include anything that has growth factors and cytokines derived from blood (Platelets). When cells talk to each other, they make proteins and peptides that are the messages that pass from one cell to another and determine how the cell will respond. These are called cytokines and include growth factors. PRP stem cell injections for the knee, hip and spine use these cytokines to control the actions of surrounding cells. Platelets store granules of these cytokines that can be harvested and used. The use of platelet-rich plasma (PRP) in medicine has become increasingly more widespread during the last decade. Most studies on the subject are carried out in areas such as orthopedics, sports medicine, and odontology. Recently platelet-rich plasma (PRP) has also been used in the dermatologic and wound healing field, where PRP has been used in order to promote accelerated wound healing and as an adjuvant treatment in rejuvenation, alopecia, hair loss and even following laser sessions. The use of platelets was particularly fortuitous given that the main initial interest was to take advantage of the adhesive and haemostatic properties of the homologous fibrin during bone surgery. A realization of the clinical potential of PRP-therapies has also followed the positive clinical observations, such as enhanced bone formation and anti-inflammatory functions, during oral and maxillofacial applications. PRP seems to have a role to play in the treatment of extra-articular symptoms.

## Biography

Maria Fatima Ali received her Bachelor of Dental Surgery from Jinnah Medical and Dental College Karachi Pakistan. She is currently an MPhil scholar at Dadaboy Institute of Higher Education. In 2014, she joined Hamdard University Dental Hospital where she did her House job following which in 2015 she joined the Department of Pharmacology as a Lecturer and later that year she took up the position of Research Associate at Musavvir Stem Cell Clinic. She is currently pursuing her MPhil degree in the field of Molecular Medicine and Medicinal Chemistry. Her current research interests include Stem Cells, Platelet Rich Plasma, Platelet Rich Fibrin and Regenerative Medicine.

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