

## Editor



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Dear Colleagues,

Virchow has taken a good initiative to open the dialogue among medical fraternity on Teriparatide by starting "**Osteotide Clinical Expertise**", a bi-monthly newsletter which will help in enriching the knowledge about Teriparatide.

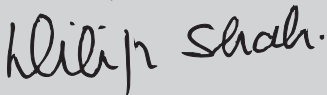
Teriparatide (PTH) though available in the country for almost a decade & getting wide acceptance among Indian Orthos, Rheumatologists, Endocrinologists & Spine Surgeons still many doctors are not aware of the benefits of Teriparatide & hence their patients are getting deprived of its unique advantages.

Role of Teriparatide is now not limited to only osteoporosis but it has multi-dimensional role like in accelerated fracture healings.

This second newsletter of "**Osteotide Clinical Expertise**" talks about positive role of Teriparatide in Fracture Healing – a case study presented by Dr. Manish Khanna a leading Orthosurgeon from Lucknow.

I am sure you all will come forward & share your challenging cases, so we could spread the knowledge about Teriparatide to all our colleagues.

Thanks,



Dr. Dilip Shah



### Dr. Manish Khanna

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## Teriparatide has a positive role in Fracture healing

Delayed union is a troublesome situation faced in orthopaedic surgery for which Teriparatide is a

comfortable choice. Intermittent parathyroid hormone administration has a potent ability to

increase osteoblastic activity at the delayed union site. Each fracture has a failing risk which can lead to a delayed to non-union. Among the noninvasive strategies proposed to improve bone healing the use of Teriparatide, a drug for the treatment of osteoporosis, has increasing supporting data. Many studies have demonstrated it's the positive affect on fracture healing with a more rapid evolution of the reparative callus.

There are many cases where we have Teriparatide used after delayed union. Two of the cases were very notorious where we used Teriparatide to accelarete the callus. Both patients were operated in March 2015 – One was oblique fracture shaft of humerus and other fracture shaft femur. Both patients were in there 50s and diabetic. Humerus was managed by open reduction and internal fixation by DCP and femur by interlocked nail. There was delayed in callus formation for which we started Teriparatide to accelerate the union process. In both these cases since other parameter were normal so was started 6 month post surgery. Also we have used in one case of infected non-union tibia where after second surgery distraction Osteogenesis was being done with external Fixater. Post-surgery teriparatide was also started along with distraction.

Abundant data and some clinical data are, instead, available about Teriparatide's positive effect on fracture healing and some case reports also refer about a role of Teriparatide in the treatment of non-unions. A positive effect of Teriparatide has been demonstrated also in the

fixation of bone implants in various experimental models distraction osteogenesis and in bone defect filling.

The data significantly suggest the effectiveness of Teriparatide as an anabolic agent for the bone union in various conditions. Its positive effect is the result of anabolic stimulus on osteoblasts which speeds callus formation and maturation, with a more rapidly achieved mechanical competence.

In conclusion on the strength of available data, it is possible to affirm that a conceivable positive effect of Teriparatide on fracture healing is well documented.

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For sharing your case studies or any clarification please write to [info@osteotide.org](mailto:info@osteotide.org)

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