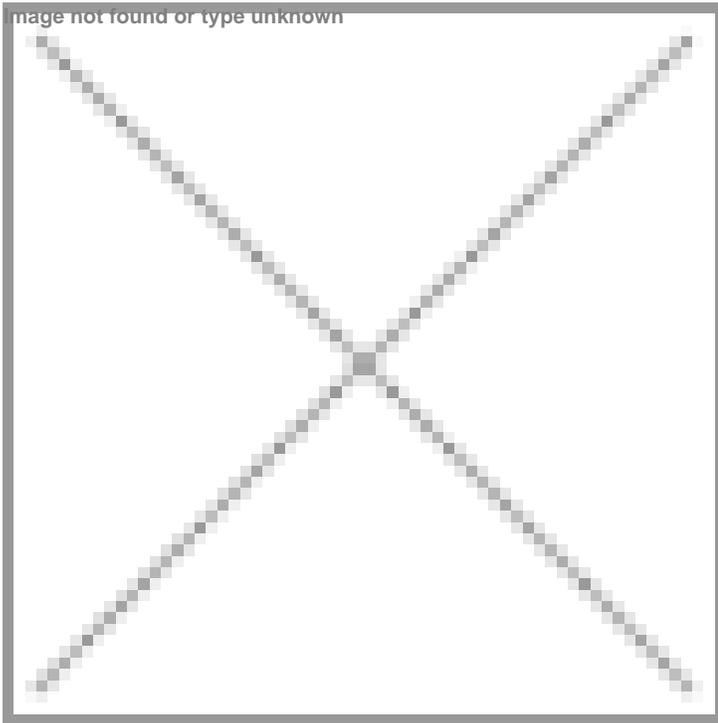


Parvathy Hospital takes Cartilage Repair to the next level

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Dr. Vetri Kumar, Consultant Knee surgeon of Parvathy Hospital, along with his 4 member team (surgeons from Italy and Poland performed this innovative technique called Cartilage Repair using Mesenchymal Stem Cells



Articular cartilage repair has been approached with a new perspective by orthopaedic experts from Parvathy hospital, by reducing the two-step surgery process and thereby reducing the cost of surgery approximately by 5 times. This case has been featured in the Asian Journal of Arthroscopy.

Dr. Vetri Kumar, Consultant Knee surgeon of Parvathy Hospital, along with his 4 member team - surgeons from Italy and Poland performed this innovative technique - CARTILAGE REPAIR USING MESENCHYMAL STEM CELLS. This technique provides a new approach to articular cartilage repair in the form of Biological Arthroplasty. Osteoarthritis of the knee is the most common problem worldwide leading to disability. Almost 19% of population above 40 years and 50% of people above the age of 75 years in the world suffer from it. Over the years people diagnosed with osteoarthritis have offered the solution of knee replacement which helps the patient to lead a pain free but compromised life by avoiding jogging, squatting, playing sport. However, considering the new-gen middle age population who prefers to be active even at the age of 60 years, surgery using artificial prosthesis fails to satisfy them. Hence, orthopaedic surgeons along with biologist and researchers have been hunting for a biological solution for more than a decade.

Dr. Vetri Kumar, trained by Dr. Alberto Gobbi, Milan, Italy - The pioneer of cartilage repair using stem cells has put an end to the above said problem. This technique has provided a new dimension of cartilage repair. Articular cartilage is responsible for

the smooth gliding of the knee, but it is a delicate structure with poor healing capacity. Hence once damaged it requires a fine repair to augment its healing process. Usually the surgery for cartilage repair is a two-step process involving Autologous Chondrocyte Implantation (ACI). This is done by harvesting and growing the patients own cartilage cells in the lab for 2-3 weeks following which the patient undergoes the second procedure for implanting the grown cartilage tissue, this two-staged procedure leads to longer recovery, longer holiday from work also it increases the cost of the procedure by 5 folds.

According to Dr. Vetri, "This isn't a procedure which everyone suffering from OA can fancy. Owing to the longer rehabilitation, this procedure is aimed at patients who are athletic and who leads an active lifestyle. Rather patient choosing this procedure its more about their activity which demands this procedure."

Keeping this base, a single step procedure with the use of Bone Marrow Aspirate Concentrate (BMAC) has been studied and successfully carried out in patients with osteoarthritis leading to preserving the patient's natural joint for 10 years and beyond. This eliminates the need of two-step surgery and gives back normal active lifestyle to the patients.

Dr. Vetri Kumar concludes, "I started as a joint replacement surgeon however latest techniques have made me lean towards joint preservation techniques. This, we at Parvathy's believe will improve the quality of life in every patient who comes with different demands. Our team will continue to research in this field making joint preservation possible for a much wider group of patients."