

**ARTRITIS: THE ITALIAN ALTERNATIVE  
GLUCOSAMINE SULFATE REDUCES THE RISK OF SURGERY BY 70%.**

***Milan November 3<sup>rd</sup> 2004-*** Patients with arthritis of the knee that were treated with Glucosamine Sulfate for a time span between 12 months and 3 years, within the 5 years subsequent to stopping the treatment, have had less prosthesis replacement surgery than a similar group of patients that were not treated with the same drug. The risk reduction for surgery was over 70%.

The results were presented during sessions at the American College of Rheumatology (the most important Rheumatology congress in the world, held in San Antonio, Texas from October 16<sup>th</sup> to the 24<sup>th</sup>, 2004) by Prof. Karel Pavelka, Director, Rheumatology Institute of the University of Prague. Prof. Pavelka directed and reported the study which was a result of a cooperation between his and a team of Italian researchers. The conclusions open important perspectives for the long run control in the evolution of this chronically debilitating pathology.

Osteoarthritis is a chronically debilitating illness of the limbs that affects about 12% of the world population and more than 4 Million Italians. In its progression, arthritis is painful and limits functionality, together with the progressive worsening of joint structure. Particularly it affects the joints of the lower limbs, hip and knee; there is enough damage that can only be partially repaired by prosthesis replacement surgery. Before this happens, usually the patient is treated with symptomatic drugs, mainly non-steroid anti-inflammatory, that offer temporary relief, but that cannot stop the progression of the illness, quite to the contrary, their long term intake may lead to tolerance problems, as it was recently demonstrated. The other possibility, better yet the complementary possibility (because arthritis treatment includes various elements) is the utilization of drugs that slow down the decaying of joint structure and limit symptoms' progression. The drug that was proven effective is Glucosamine Sulfate, developed by Rottapharm Laboratories in Monza, which jumped in the forefront of scientific write ups when, in June 2001, prof. Reginster of the University of Liège in Belgium demonstrated, as reported by the prestigious english medical journal The Lancet, how the intake of the drug up to 3 years limited joint damage, evaluated by x-rays, and how it controlled pain and the functional limitation during the long period of time.

The results were then confirmed by Prof. Karel Pavelka, Director of the Rheumatology Institute of the University of Prague, in a twin study published some months later by the equally prestigious american journal Archives of Internal Medicine.

"But - explains prof. Pavelka - another very important result and never identified for any symptomatic drug which the effect is generally documented

for a few months, we did not fully comprehend what it meant, in the future life of an arthritis patient, being able to decrease the progression of the structural damage that we observed, like the absence of restriction of joint spacing, observed by x-ray, in patients treated with the drug compared to the ones who received placebo.”

Researchers then decided to re-evaluate patients 5 years after, in average, the end of the study and thus starting conventional therapies.

“We have noted that – continued prof. Pavelka- of the 136 patients who were treated in the earlier study for at least 12 months to 3 years, a good 16.4% of those who were given placebo were facing a knee replacement surgery during the 5 year follow up, against only 4.3% of those treated with Glucosamine Sulfate. The risk reduction for an operation was then 73%”.

It was observed that patients who had to get prosthesis were mainly the ones who had a greater reduction of joint spacing during the study, the incidence of which was strongly reduced by Glucosamine Sulfate. That confirmed the authors’ hypothesis that there was really a slowing down of the illness progression. “The data confirmed what was reported some months ago by prof. Reginster - adds prof. Lucio Rovati, Professor of Clinical Pharmacology at the University of Milan Bicocca and co-author of both studies as Head of Clinical Research of Rottapharm Laboratories - but this time an even stronger case for the risk reduction for surgery is unequivocal and it can be completely analyzed.”

Among the enormous social costs for arthritis (estimated for Italy to be at over 13,000 billions of old liras) those tied in to infirmity and those tied in to prosthesis surgery, in other words when the illness damages the lower limbs, represent a line item of a much greater burden on both the National Health System and on the patient. Less prosthesis surgery recurrence an improvement, then, on long-term quality of life, make Glucosamine Sulfate a primary drug in controlling arthritis, as recently confirmed in the therapeutic guidelines of the European League against Rheumatic Illnesses (EULAR) and just expanded by the Italian Rheumatic Society, both, in fact, place the drug among the top choices.

“Considering the excellent level of tolerance for Glucosamine Sulfate - says prof. Montecucco - we have the possibility to not only control arthritis symptoms, but also to limit the worsening in patients with initial forms of the disease or subject to relevant risk factors.”