Japan Bio Products. Placenta Extracts and Medical Applications

By: Dr. Jesús F. Ballesteros

Japan Bio Products (JBP) is a multinational pharmaceutical group with headquarters in Tokyo-Japan, manufacturing sites in Fukuoka-Japan and Seoul-South Korea, subsidiaries in California-USA, Shanghai-China, Vietnam, Taiwan, Zurich-Switzerland and distributors worldwide.

Since 1954 is the world leading company in placental extraction procedures diversifying from human to porcine and equine placental extracts. From these raw materials and through our unique technology, JBP is continuously developing medicines, dermocosmetics and food supplements. In addition to that, recently and to widen the company portfolio JBP launched the thinnest needles currently available worldwide (JBP Nanoneedles) which provides the finest injection performance for botox, hyaluronic acid, anaesthetics, placental extracts and those products used in mesotherapy medical practices.

From the very beginning one of the main company commitments have been the product safety and because of that, the most advanced technology has been applied to our manufacturing and quality control procedures to ensure a whole viral and toxics removal.

Placental extracts have been used from long time ago in medical practice due to its anti-aging and wound healing properties. But more than that during our lecture the pharmacological basis and mechanisms of actions of the human placental extract components will be introduced.

Finally, the most advanced results on aesthetic and dermatology application, as the recent studies on psoriatic patients will be shared with the audience by European opinion leaders.

Rejuvenation and Psoriasis. Justification of using Placental Extracts

Placental Extracts for skin rejuvenation are perfectly useful when mesotherapy, electroporation, food supplements or subcutaneous and intravenous procedures are followed due to the large amount of active ingredients to provide. Among them, Growth Factors play a key role.

For decades it has become evident that placenta is the source of a large number of biologically active molecules, such us hepatocyte growth factor (HGF), epidermal growth factor (EGF), transforming growth factor _ (TGF_) and transforming growth factor _ (TGF-_), and others like vitamins, minerals, aminoacids, glucopolysacharides…). Hormone age is a key evidence for aging and IGF1 (Insuline-like Growth Factor 1) is the most important marker of hormone age.

It has been demonstrated IGF-1 decreases with aging and placental extract administration allow to increase its levels nearly double in one month.

Placental extracts has been used in medicine and particularly as rejuvenation therapy from long time ago in Japan, South Korea, Russia, but also in Western Europe countries as Italy.

Placental extracts and particularly the products marketed by Japan Bio Products as have shown benefits a) in wound healing and tissue repair where placental extracts and ascorbic acid had similar

effects on fibroblast proliferation; and placental extracts (PE) provide fibronectin type III peptide, and promotes cell adhesion, b) as antioxidant because PE provides peptides produced from collagen, and L-tryptophan, c) in vitiligo acts inducing melanogenesis c) in hypersensitivity where a immunomodulating effect in allergic skin diseases was demonstrated, and in many other skin conditions and rejuvenation procedures.

Japan Bio Products Research and Development Dept. along with their Associated Doctors have been studied placental extract properties and components since 1954 evidencing the placental pharmacological effects are autonomous nervous system adjuvant, improvement of basal metabolism and immunity controlling inflammation, wound-healing effect, and endocrine modulation.

Mainly, controlling endocrine is a very interesting option because the hormone usually increases notably when filling up hormone. But in placental extract, an insufficient component increases and excess component returns to normal. In shorts, it is said that, there is an effect to endocrine effects of hormone.

Commng back to dermatological pathologies, we have tested placental extracts in psoriatic patiets considering placental extract could improve the patient status due to the improvement of water retention capacity of the skin cells. Psoriasis is an immune-mediated skin disease that affects 1–3% of the population worldwide, with an equal sex distribution. The common form of the disease, termed ‘plaque psoriasis vulgaris’, is observed in more than 80% of patients and is characterized by erythematous scaly plaques, typically on elbows, knees, scalp and buttocks. Plaque size can vary from minimal to the involvement of the entire skin surface[3)].

Histological examination of psoriatic plaques reveals keratinocyte hyperproliferation with parakeratosis and elongation or rete ridges, increased angiogenesis and dermal infiltration of inflammatory cells, including T-cells, neutrophils, macrophages and DCs (dendritic cells)

In our study, we have treated patient with the following recruitment criteria during 12 weeks and the obtained results were very satisfactory just after a couple of weeks.