

PRODUCTS



THE FIRST BIOBRIDGE ASIA-PACIFIC CONFERENCE WAS HELD IN SYDNEY ON 23-24 FEBRUARY, WITH LOCAL AND INTERNATIONAL SPEAKERS SHARING THEIR PROTOCOLS, SUCCESSES AND CHALLENGES IN THE EXCITING FIELD OF REGENERATIVE MEDICINE.

he prestigious invitation-only international conference, hosted by AMSL Medical Aesthetics (RegenLab), showcased the latest developments in regenerative medicine, with a special focus on advancements in platelet rich plasma (PRP) treatments.

Although a relatively new field, regenerative medicine is fast gaining traction throughout the world and rapidly becoming mainstream. Researchers are exploring the possibilities of using the body's own natural processes - calling upon platelets, stem cells and growth factors – to help repair and replace human tissue and organs. Regenerative medicine using PRP has a seemingly endless variety of applications - from musculoskeletal and sports medicine through to hair restoration, sexual function and aesthetic medicine.

'The Sydney Biobridge Asia-Pacific Conference is a first for this region and allows us an unparalleled setting to present our latest findings and thoughts and also demonstrate the art and anatomy of PRP applications,' says Adelaide cosmetic surgeon Dr Robin Chok, who also presented at the conference. 'This conference brings together the best practitioners specialising in PRP who are passionate about the technology, as well as the relevant techniques associated with PRP applications.'

'I personally had my knees treated with RegenLab PRP by Dr Phillip Lim from Sydney and my tennis elbow by Dr Patrick Goh from Singapore with great results so I am a strong believer of PRP in the field of medicine, not just aesthetics. At a more local Biobridge conference such as this, we are

able to concentrate on the key issues, especially in gynaecology and musculoskeletal medicine, which have been largely forgotten or distracted with the growth of surgical and pharmaceutical interventions.'

'Many practitioners commented they were gathering more information than ever as the presentations were spaced generously to allow experts from Hong Kong, Singapore, Taiwan, Australia and Serbia to discuss in detail their experience in PRP medicine,' he adds. 'I personally enioved learning about new musculoskeletal treatments and broadening my knowledge of ultrasound-guided PRP treatments. It was also a rare event for many to hear my presentation on my PRP-HA combination 3D Facelift in more detail than possible in most combined conference events.3

PRP: 101

Platelet Rich Plasma is blood plasma enriched with a higher concentration of platelets. These platelets contain a cocktail of beneficial ingredients, such as growth factors and cytokines that cause a cascade of anti-ageing activity after being re-injected back into the skin.

Specifically, growth factors are involved in stem cell migration, differentiation and proliferation, as well as stimulation of fibroblasts and endothelial cells to induce new collagen and blood vessel formation. As well as the platelets, the plasma itself contains many factors that are essential for cell survival. These include nutrients, vitamins, hormones, electrolytes and proteins. There are also essential molecules to help build a scaffold for the formation and migration of new cells.

RegenLab PRP was the first to market PRP in the Australian aesthetic arena back in 2007. Now, with more than 100 clinical papers published, RegenLab provides evidence-based medicine for all uses of PRP. It is a proven system using optimal concentrations for optimal results.

THE ROLE OF PRP IN AESTHETIC MEDICINE AND THE NEW BIOSTIMULATION FACELIFT



The genesis of PRP for aesthetic treatment is the trademarked Vampire Facelift, developed by Dr Charles Runels in the US. It has become a popular skin rejuvenation treatment around the world, no doubt bolstered by its celebrity clientele, which includes beauty heavyweights Angelina Jolie and Kim Kardashian West.

Dr Chok has been an advocate for and leader in the field of PRP for several years. 'PRP is a unique product, from our own blood, that has the potential to help in all fields of tissue regeneration and tissue bioengineering,' he says.

A highlight of the recent Biobridge Asia-Pacific 2018 conference was Dr Chok's presentation on 'the biostimulation facelift with PRP', in which he uses a combination of HA fillers and PRP to create superior results in terms of both aesthetics and longevity.

'I became interested in PRP when I first heard about Dr Charles Runels' famous Vampire Facelift procedure, which involves the use of dermal HA fillers with PRP,' Dr Chok explains. 'The Vampire Facelift with the combination of common HA dermal fillers managed to close the gap between the potentials of a super-active growth factor-rich cellular accelerator (PRP) with the volumising lift of dermal fillers. The combination created a longer lasting and more predictable PRP result, especially in areas of the face and neck.

'Since then I have redeveloped further the combination of PRP and HA using customised HA fillers blended together with RegenLab PRP tubes. The combination of a more fluid, less dense HA and PRP creates an immediate strong biostructure known as bioscaffolding. By controlling the shape and density of the bioscaffolding of the PRP and HA, a more controlled and directional lift of tissue regeneration can be made possible.'

Dr Chok has observed that, without HA as a reservoir for the growth factors released by PRP, the effect of PRP generally lasts 15 to 30 days only, compared with the HA-PRP combination which offers more than 120 days of tissue growth stimulation. In addition, he has found collagen and vascular matrix density increase as much as 100 per cent in most cases with the presence of HA bioscaffolding. HA is water permeable and hence cell friendly, allowing

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nutrients and cellular migration to happen freely and with ease.

'The technique I coined ReGenesis Bio-Matrix 3D Facelift at the 2015 Biobridge Conference in Venice is essentially a combination of the art of facial beauty and biotissue engineering. The combination of the HA and PRP is adjusted to suit different compartments of the facial natural fat pads and deep fascial ligaments creates a natural lift which is rejuvenation of the face in its truest sense,' he says.

'This combination creates a rejuvenated substructure of the face and neck that is more than just new collagen growth. The whole environment of the facial tissue – that is muscles, ligaments, fat pads and vascular blood circulation – are rejuvenated.'

'Essentially, PRP combined with HA is a biostimulation of the local stem cells,' he continues. 'Stem cells in the area treated are reactivated by the PRP growth factors thus maintaining a longer repair and regeneration of tissue. The new tissue regenerated is actually younger and not just made to look younger as with dermal fillers alone. Hence, this is truly a new direction for tissue regeneration science and also anti-ageing medicine. Such treatment is much more advantageous than stem cell treatments which, at present, still are controversial and limited in progress and results.'

With the 3D Biostimulation Facelift, the original facial tissue structures are all preserved; this is crucial to avoid altering the appearance of the face. The face essentially looks fresher with a natural-looking direction of lift.

'New techniques allow the procedure to be performed quicker, with less pain and virtually no bruising,' says Dr Chok. 'Costing per procedure becomes more affordable too as less treatments are required

to achieve an optimal result. I truly enjoy seeing my PRP-HA facelift patients come back annually for their maintenance procedure; they look more youthful and glowing than they did when we started in 2012!'

PROTOCOL FOR BIOSTIMULATION FACELIFT

Dr Chok says PRP with HA treatment is largely simple as fewer treatments are required to achieve and maintain the results. Generally, a PRP-HA combination for the face and neck lasts six to nine months for each procedure; with subsequent procedures, patients with a healthy lifestyle only need an annual treatment.

In terms of patient selection, the best candidates are those in good health and non-smokers. 'Smoke and stress seem to be the main limitations for PRP as the result can be short-lived despite repeated booster treatments,' Dr Chok explains.

'PRP and PRP combined with HA treatments are generally controlled and safe, but with larger volumes of HA and dermal fillers being used, knowledge of safe anatomy is crucial,' he advises. 'Too much filler too superficially even with the combination of PRP will not look right. While there are no long-term complications generally, patients will not be enjoying optimal results.'

'At my clinic, Regenesis Cosmetic Surgery in Adelaide, we have found PRP-HA procedures to be synergistic with Healite LED treatments and also radiofrequency procedures such as Exilis RF and Intensif RF micro needling. The Healite LED is most popular as it is both relaxing and non-traumatic. Skin treated using this combination of PRP and LED stimulation glows

and feels amazing to touch. Our latest addition to this combination is LaseMD Thulium Laser treatment by Lutronic to further refine the skin and enhance the lift generated by the PRP-HA bioscaffolding,' he adds.

WHAT'S THE FUTURE FOR REGENERATIVE MEDICINE?

Regenerative medicine is rapidly becoming the norm, coinciding with a better understanding of how we can preserve our body function with our own body tissue. 'With the advent of 3D printing of tissue bioscaffolding to be activated by PRP, we can essentially recreate lost tissue due to trauma, surgery, cancer and also birth defects at much lower costs without the need for expensive laboratory growth,' says Dr Chok.

'RegenLab is at the forefront of these technologies and science and I am privileged to be amongst their main contributors for research and growth. Australia and New Zealand are already ahead of many countries as we have a large and ever-increasing ground of dedicated PRP doctors working to decode this science of regeneration. Maybe with cord blood banks now easily accessible for those preserving their newborns' cord blood, we may be able to take regenerative medicine to even greater heights, especially for cancer and auto-immune diseases. The future of this science is bright - the best medicine for all of us is essentially what we are born with and created by our own body and DNA,' Dr Chok concludes. AMP

For more information call RegenLab PRP on 02 9496 1426 or visit www.regenlabprp.com