

**Artikel Ilmiah**

**Judul:**

**Reconstruction of nostril stenosis after skingraft nasal on severe facial burn  
using cartilage graft, vestibular flap and nasal stent**



**Ulfa Elfiah**

**Disampaikan pada acara:**

**12th Asia Pacific Burn Congress on 14 -17 Aug 2019.**

**Singapore General Hospital, Singapore**

# Mepilex® Ag – the proven burn solution.

Reduced pain and distress during application and removal

Metric	Mepilex Ag	Reference Ag
Pain and anxiety at dressing application	-37%	
Pain and anxiety at dressing removal	-32%	
Timing of children healed	14 days	18 days
Admission to Ag	8 days	

**Why delay healing?**  
A randomised clinical study showed significantly faster healing with Mepilex Ag in paediatric patients with burns. After eight days, 75% of the children treated with Mepilex Ag had healed while it took two weeks to heal 75% of the children with Acticoat®. After adjustment for burn depth, patients receiving Acticoat® significantly increased the application days to full re-epithelialization by 46% (p<0.01) compared to Mepilex Ag.

**Safarac**  
Wound Care

**Mölnlycke**

**Message**

- Message by Advisor
- Message by Organising Co-Chairman

**Organising Committee**

**Programme at a Glance**

**Venue Information**

**Floorplan for Trade Exhibition**

**Plenary Session Speakers**

**Abstracts**

- Burn Care in Pre hospital & Austere Environment
- Burns Education
- Critical Care / Resuscitation and Pharmacology
- Early Excision and Surgical Techniques
- Infection Control and Diseases
- Innovations in Rehabilitation
- Nursing Care in Burn Centre
- Nutrition and Metabolism
- Others
- Paediatric / Electrical & Chemical Burns
- Paediatrics Wound Management
- Psycho-Social Care
- Reconstruction
- Scars Management and Pain Control
- Surmounting Challenges in Rehabilitation
- Tissue Banking
- Tissue Engineering
- Wound Care Chronic Dressing

**Sponsors**

© 2015 Mölnlycke Health Care AB. All rights reserved. For more information on Mepilex Ag, please visit [www.molnlycke.com](http://www.molnlycke.com).  
Mepilex Ag is a registered trademark of Mölnlycke Health Care AB. Acticoat is a registered trademark of Mölnlycke Health Care AB. All other trademarks are the property of their respective owners.  
Mepilex Ag is a registered trademark of Mölnlycke Health Care AB. All other trademarks are the property of their respective owners.

### Professor Lee Seng Teik

Emeritus Consultant, Singapore General Hospital  
Organising Chair for 1st Asia Pacific Burn Congress

#### Message by Advisor, Association for Burn Injuries, Singapore

The inaugural Asian-Pacific Burns Congress was held in Singapore in Feb 1992, almost three decades ago. It was held as a forerunner to the 6th ASEAN Congress of Plastic Surgery which also had its inception in Singapore a decade previously in 1982. The National Burns Association of Singapore was formed two years prior to the staging of this AP Congress. The year 1992 is also very significant because it marked the 20th anniversary of the founding of the National Burns Centre in the Singapore General Hospital in 1972.

I have been involved in every stage of the development of burns care in Singapore over the last 5 decades. Tremendous strides have been made in the clinical management of burns patients and also in the research into such exciting areas of basic research such as epidermal stem cell culture, tissue engineering and new wound healing agents. These developments have spawned the founding of other new Societies in Singapore devoted to wound healing, Stem Cell Research and Tissue Regeneration.

It is interesting to look back to the inaugural conference in 1992 which had the participation of eminent personalities involved in Burns prevention like Dr CJ Romer, Chief Injury Prevention Programme of WHO, Prof IT Hirayama WHO Collaborating Centre on Injury Prevention and Prof David Heimbach the President of ISBI. The thrust of the scientific programme was then on Burns Prevention especially in the Asian Pacific Region. This has had a tremendous impact on burns incidence in various countries in the region and in Singapore, burns admissions have been reduced by almost half in the past three decades.

Although tremendous strides have been made regarding our understanding of the epidemiology of burns, their prevention and clinical management, burns remains as an extremely debilitating form of trauma. Burns patients who survive their ordeal will continue to suffer both physically and psychologically. Similar challenges confront the clinicians and members of the multi-disciplinary team and the researchers who are involved in burns care and management. The gaps in our knowledge can only be filled by advances made in our basic and clinical research. Conferences such as these will allow everyone who is dedicated to the field of Burns to share their knowledge and interact with one another for the improvement of care of their patients. It is my wish that all participants in this 12th Asia Pacific Burns Congress will benefit greatly by their attendance and participation.

### Dr Chong Si Jack

President, Asia Pacific Burns Association  
President, Association for Burn Injuries Singapore  
Medical Director Skin Bank Unit  
Singapore General Hospital

### A/Prof Ong Yee Siang

Head & Senior Consultant  
Department of Plastic, Reconstructive and Aesthetic Surgery  
Singapore General Hospital

#### Message from Organising Co-Chairman

Singapore General Hospital and the Association for Burn Injuries, Singapore are honored to organize the 12th Asia Pacific Burn Congress (APBC) in Singapore. This meeting has been endorsed by the Asia Pacific Burn Association (APBA) and also supported by the International Society for Burn Injuries (ISBI).

The APBC is the landmark meeting for the Asia Pacific burn care community since its inauguration. This event brings together the top experts in the region to exchange ideas on burn care. The theme of this congress is "Burn Care Excellence through Multidisciplinary team work". This is age old adage. However it captures the essence to achieving excellence in Burn Care. Burn Injuries is a complex and debilitating disease that despite its advancement in the significant reduction in mortalities over the last few decades. Holistic recovery can only be achieved through multidisciplinary care through doctors, nurses, allied health professionals, care givers and the patients themselves.

This congress has been fortunate to receive the support of the regional community with 320 abstracts submitted from 24 countries in the region. This demonstrates the dynamism of burn care community in the region as well as her commitment to teaching and research.

The highlight of this congress will be the signing of the Asia Pacific skin banking guidelines. This skin banking guidelines will undoubtedly help skin banks in the region to benchmark against top centres in the region and provide the platform for future agreements between skin banks. Having a set of regional standards will facilitate regional skin banks to formalise agreement for exchange skin expediently. This is critical particular during mass casualty incidents where allograft skin from established sources is critical for the survival of the patients. We will like to congratulate the skin banking experts in APBA for developing the skin banking guideline.

This congress will not have been successfully organized without the support of our industry partners. They are part of the burn care ecosystem and have helped many clinicians translate and realize their research for the benefits of burn victims. In conclusion, Singapore is proud to host the 12th APBC and we wish every delegate an enriching and meaningful congress.

## ORGANISING COMMITTEE

### Advisory Committee:

Prof Lee Seng Teik  
Prof Tan Kok Chai  
Prof Colin Song  
Assoc Prof Tan Bien Keem  
Ms Goh Meh Meh

### Organising Co-Chairman:

Dr Chong Si Jack  
Assoc Prof Ong Yee Siang

### Committee Members:

Dr Chan Hong Ngee  
Ms Joanne Jovina Cheng  
Dr Alvin Chua  
Assoc Prof Piotr Chlebicki  
Mr Er Wei Xiang  
Ms Ip Soo Ching Annabelle  
Dr Joethy Janna-Vale  
Ms Kala Adailan  
Dr Kang Chun-Wui Gavin  
Dr Cecilia Kwok  
Ms Lee Lay Eng  
Dr Gale Lim Jue Shuang  
Ms Coreen Low  
Dr Jasmine Ong  
Ms Ong Shihui  
Ms Seah Pei Fen  
Ms Anna Tan  
Ms Emily Tan U-Tong  
Dr Tan Woon Woon Pearlle  
Ms Teng Chai Lian  
Ms Sanda Thangarajoo  
Ms Yap Chew Theng

### ORGANISING SECRETARIAT SGH Postgraduate Medical Institute:

Ms Emily Lim  
Mr Cheng Kam Fei  
Mr Lin Jiahui  
Ms Carynna Ng

### Association For Burn Injuries Singapore (ABIS):

Ms Ho Wen Ning

### SingHealth Communications Department:

Ms Chio Shu Yu  
Ms Lo Sok Wan

## ADVISORY COMMITTEE



**Prof Lee Seng Teik**  
Emeritus Consultant,  
Plastic, Reconstructive & Aesthetic Surgery  
Singapore General Hospital

Prof Lee is currently the Emeritus Consultant in Dept of PRAS. He has wide ranging interests in education, research and his sub-specialty interest is in cleft and craniofacial surgery. He has 138 publications in peer-reviewed journals and written 17 editorials and 8 chapters in books. He is the recipient of 48 research grants and numerous National, Regional and International awards and lectureships. In his spare time, Prof Lee has been actively engaged in humanitarian missions to SE Asian countries and China. In 2006, he was given the prestigious Singapore International Foundation award in recognition of his humanitarian activities by President SR Nathan. In 2012, he was given the status of 'Honorary Citizen' of Cheng Mai County, Hainan province, China.



**Prof Tan Kok Chai**  
Senior Consultant, Plastic, Reconstructive & Aesthetic Surgery, Singapore General Hospital  
Associate Professor, Department of Surgery,  
National University of Singapore (NUS)  
Adjunct Professor, NUS-Duke Medical School  
Clinical Associate Professor with the Department of Surgery,  
Yong Loo Lin School of Medicine, NUS

Prof Tan is a Senior Consultant Plastic Surgeon at Singapore General Hospital. He is also the Associate Professor at the National University School of Medical Faculty and Adjunct Professor at the NUS-Duke Medical School.

His main interest is in Reconstructive Plastic Surgery including Wounds and Burns Injuries Treatment.

Prof Tan was invited speaker at several overseas plastic surgery meetings and has over 60 publications in Medical Journals. He has also held various positions in Professional Societies of Plastic Surgery, Aesthetic Surgery, Burns Injuries, Hand and Microsurgery in Singapore.

Prof Tan was appointed the Master of the Academy of Medicine, Singapore from 2010-2012





### Prof Colin Song

Department of Plastic & Reconstructive Surgery  
Fiona Stanley Hospital, Perth, Australia

#### Positions:

At present Head of Service at Fiona Stanley Hospital, Perth, Australia

#### Previous:

Medical Director of Cape Plastic Surgery, Senior Consultant & Head of Dept. SGH Plastic, Reconstructive & Aesthetic Surgery, & Director SGH Burn Centre, Singapore

#### Academic Appointments:

**Present:** Adjunct Clinical Professor, Curtin University Medical School  
Advisor, JCST Residency Accreditation Committee, Singapore

**Previous:** Professor, Duke-National University of Singapore Graduate Medical School & National University Singapore Medical School,

Inaugural President of the College of Surgeons, Academy of Medicine, Singapore  
Chairman of Educational Subcommittee of Association of Plastic, Reconstructive & Aesthetic Surgeons of Southern Africa  
Head of Dept. Plastic & Reconstructive Surgery, University of the Witwatersrand, Johannesburg  
Member of the Editorial Board — Journal of Plastic Reconstructive & Aesthetic Surgery

#### Professional Society Memberships:

Past & Founding-President of the Asian Wound Healing Association & Wound Healing Society Singapore.  
Past President Association of Burn Injuries Singapore & Singapore Association of Plastic Surgeons  
Publications: 3 Book Chapters, 3, 65 Papers



### Assoc Prof Tan Bien Keem

Senior Consultant  
Plastic, Reconstructive & Aesthetic Surgery, Singapore General Hospital  
Deputy Director  
Tissue Transplant, SingHealth Transplant

Assoc Prof Tan is currently the Deputy Director, Cell & Tissue Transplant, SingHealth Transplant, Programme Director, Skin Bank, SGH, as well as part-time faculty at the Duke-NUS Graduate Medical School Singapore. He is Past President of the Association for Burn Injuries and the President of the Wound Healing Society in Singapore. He is also Vice-President of Singapore Reconstructive Microsurgery Society and Chairman of the Asian Symposium for Breast Plastic Reconstructive Surgery, 2013. He has clinical interest in transplant and is currently developing uterine transplant and hand transplant with the O&G and Hand Surgery Departments respectively. Presently, he is also assisting in the arterial revascularization of liver transplants in SGH. He is currently developing tissue banking in SGH and is in the process of attaining American Association of Tissue Banking accreditation for the Skin Bank in SGH.

Assoc Prof Tan was awarded the 8th Yahya Cohen Memorial Lectureship: Flap Prefabrication – The Bridge between Conventional Flaps and Tissue-Engineered Flaps at the 37th Annual Combined Surgical Meeting in 2003 and presented the Outstanding Faculty Award at the Residency in SingHealth Excells in 2015. He has been involved in research, education and clinical treatment related to microsurgery for more than 10 years. He has been the Organising Chairman of the biannual Microsurgery Course for eight years and a trainer in the Basic Surgical Skills Course for nine years. He is also the Organising Chairman of our biannual Cadaveric Flap Dissection Course 2013 and 2015 for which he has published several Flap Books. He is an internationally recognised speaker, clinician and researcher and has been invited to lecture in Berlin, Barcelona, Augusta (US), Bangladesh, Indonesia and Taiwan. He has held several mission trips to the Combined Military General Hospital, Bangladesh. He has published extensively in numerous medical journals and books.

## ADVISORY COMMITTEE

### Ms Goh Meh Meh

Deputy Director Nursing,  
Operating Theatre Services,  
Singapore General Hospital



Meh Meh is the Deputy Director Nursing of Operating Theatre (OT) Services in Singapore General Hospital. She oversees the clinical nursing administration and overall management of the OT performances, processes and manpower planning

Since 2009, Meh Meh oversees the revamp and transformation of the Theatre Sterile Supplies Unit into a state-of-the-art facility with advanced sterile processing capabilities through IT automation for high levels of quality.

She also successfully optimised OT utilisation to reduce surgery wait time for patients.

She has been involved in many quality projects and research to optimise patient care in perioperative services and published articles in international journal.

## ORGANISING COMMITTEE

### Organising Co-Chairman

#### Dr Chong Si Jack

Organising Chairperson, 12th Asia Pacific Burn Congress  
President, Asia Pacific Burns Association  
President Association for Burn Injuries Singapore  
Medical Director Skin bank Unit  
Singapore General Hospital



Dr Chong Si Jack is currently the president of Asia Pacific Burn Association and the founding council member of the Asia Pacific Scar Society.

He spearheads the strategic development of burn care in Singapore. He has more than 100 publications including books and book chapter and sits on the editorial board of international journals. He holds multiple grants with current interest in innovative dressings and skin substitutes.

### A/Prof Ong Yee Siang

Organising Chairperson  
12th Asia Pacific Burn Congress  
Head & Senior Consultant  
Department of Plastic, Reconstructive and Aesthetic Surgery  
Singapore General Hospital



A/Prof Ong Yee Siang is Senior Consultant in Department of Plastic, Reconstructive and Aesthetic Surgery in Singapore General Hospital. He is also the Program Director for Singhealth Plastic Surgery (2012-2018) and Surgery in General. He graduated from Cambridge University in 1996 and completed his Plastic Surgery training in Singapore before embarking on 1 year fellowship in Reconstructive Microsurgery at Duke University, USA. His main area of practice is in Reconstructive Microsurgery and Burns.

## ORGANISING COMMITTEE

**Dr Chan Hong Ngee**  
Senior Principal Clinical Pharmacist  
Inpatient Pharmacy  
Singapore General Hospital



Hong Ngee is a clinical pharmacist at SGH specialises in critical care. Her primary practice sites are Medical ICU and Burns Unit. She is in-charge of Burn Care service and oversees staff development, planning, conduct and standards of practice in the area of burn care management.

As a critical care pharmacist she plays an integral part in interprofessional collaboration working along the multidisciplinary team in providing care to the critically ill and burn injury patients. On the education front, she serves as the Programme Director for SGH PGY2 Critical Care Pharmacy Residency Programme and Associate Programme Director for National PGY1 Pharmacy Residency.

**Ms Joanne Jovina Cheng**  
Senior Nurse Clinician  
Department of Plastic, Reconstructive & Aesthetic Surgery  
KK Women's and Children's Hospital



Advanced Practice Nurse (Paediatrics) and Senior Nurse Clinician Joanne works in the Department of Plastic, Reconstructive and Aesthetic surgery, KKH. She is also an adjunct lecturer at National University of Singapore, Alice Lee Centre for Nursing Studies, Masters of Nursing Program.

She has broad interest in wound healing and has authored and co-authored many presentations and posters at local and international conferences.

Outside her institution role, she actively volunteers as a clinical coordinator for SmileAsia missions. She is also a life member of Association of Burns Injuries Singapore, and Cleft and Palate Association Singapore (CLAPAS).

## ORGANISING COMMITTEE

**A/Prof Piotr Chlebicki**  
Senior Consultant  
Department of Infectious Diseases  
Singapore General Hospital

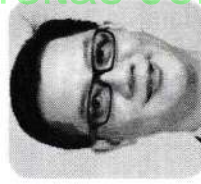


Piotr Chlebicki is an Associate Professor in Duke-NUS Graduate Medical School and Senior Consultant in the Department of Infectious Diseases of the Singapore General Hospital. After graduation from the Medical Academy of Warsaw, Poland he completed residency in Internal Medicine in USA and then specialized in Infectious Diseases in Singapore.

In addition to his busy clinical practice he is also in charge of the Antibiotic Stewardship Program in Singapore General Hospital. He is also the member of the National Antimicrobial Resistance Control Committee and he is working with the Ministry of Health, Singapore on nationwide implementation of ASP's in Singapore.

He participates in research projects investigating prevention and therapy of infections caused by multi-drug resistant bacteria. He also participates in undergraduate and postgraduate teaching in the Singapore General Hospital.

**Dr Alvin Chua**  
Deputy Head of Skin Bank Unit  
Assistant Director,  
Transplant Tissue Centre  
Singapore General Hospital



Dr Alvin Chua is currently the Scientist and Deputy Head at the Singapore General Hospital Skin Bank Unit. He is also Assistant Director of Transplant Tissue Centre, a merged entity responsible for the operations and quality assurance of comprehensive tissue banking services comprising of skin, cardiovascular tissues and iliac vessels.

In addition, he is Adjunct Assistant Professor at the Duke-NUS Medical School, leading in research projects for enhanced healing in burns and chronic wounds. Dr Chua has 16 years of tissue banking and cellular skin culture experience for clinical applications, having been trained in the USA, Switzerland and Australia.

## ORGANISING COMMITTEE

### Mr Er Wei Xiang

Senior Physiotherapist  
Physiotherapy Department  
Singapore General Hospital



Wei Xiang is a Senior Physiotherapist at the Department of Physiotherapy, Singapore General Hospital. Since graduating with Bachelor of Science (Physiotherapy), Curtin University seven years ago, he has worked alongside patients with burns injuries and reconstructive surgeries post trauma.

His interest in work rehabilitation triggered a Health Manpower Development Plan (HMDP) fellowship at Firefighters-Burn Institute, UC Davis Medical Centre and Joseph M. Still Burn Center @ Doctors Hospital in 2016. Besides managing hospital-based Return-To-Work Coordination within the nation-wide tripartite initiative: Return-To-Work Programme, he also attained Disability Management Professional certification through Canada's National Institute of Disability Management and Research (NIDMAR).

### Ms Ip Soo Ching Annabelle (RSW)

Medical Social Worker  
Burns Centre  
Singapore General Hospital



Annabelle is presently the primary Medical Social Worker with the Singapore General Hospital's Burns Centre and Trauma Activation team.

She has 14 years of experience working directly with children and youth from low-income families and in schools, domestic violence and sexual assault survivors, and burns and trauma survivors.

She supports the nursing team's Critical Emergency & Preparedness Programme Nursing Course. She is a member of the SGH Peer Support Team and offers emotional support to SGH staff.

She is a key member of the Burns Support Group Singapore that provides continuing support to burns and trauma survivors beyond hospital walls.

## ORGANISING COMMITTEE

### Dr Cecilia Kwok

Associate Consultant  
Department of Psychiatry,  
Singapore General Hospital



Dr Cecilia Kwok is an Associate Consultant in the Department of Psychiatry, Singapore General Hospital (SGH). She works closely with the SGH burns multi-disciplinary team to provide psychiatric support to patients with burns injuries.

In addition, Dr Kwok is a doctor with the Eating Disorders Program at SGH and has an interest in adolescent/young adult psychiatry. She is a Visiting Consultant in the Child and Adolescent Mental Wellness Service at KK Women's and Children's Hospital.

### Ms Lee Lay Eng

Nurse Clinician  
Burns Unit  
Singapore General Hospital



Ms Lee Lay Eng has been in nursing for 43 years of which 16 years were spent in the Burns Unit.

Collaborates with the Training and Development Unit of Alice Lee IAN (Institute of Advanced Nursing, Singapore) to train nurses for the Hospital Structured Training Program for the CEP (Critical and Emergency Preparedness) nurses as well as the Wound Management Nursing Course.

She helps facilitate the department internal Burns and Plastic Induction Program for new nurses in Burns and the Department of Aesthetic Surgery.

She also helps facilitate the ICU Induction Program for new nurses in the Intensive Care Units (Surgical ICU, Medical ICU and the Neurosurgical ICU)



## ORGANISING COMMITTEE

### Ms Coreen Low

Senior Nurse Manager  
Plastic, Reconstructive and Aesthetic Surgery  
KK Women's and Children's Hospital



Coreen is co-chairperson for the SingHealth Wound Management Workgroup and KKH Wound Workgroup. She was involved in SingHealth inaugural "Stop Pressure Injury Day" Committee for Nov 2016 and for 2017. She is Chairperson for SPID 2018.

She actively attends Wounds/Burns conferences and submit papers overseas and locally. She volunteers as a clinical coordinator for SmileAsia missions overseas.

She is Board Of Directors for Singapore Nurses Association with Honorary Treasurer portfolio. She is life member of Association of Burns Injuries Singapore, Wound Healing Society of Singapore as well as Cleft and Palate Association Singapore (Clapas).

### Dr Jasmine Ong

Senior Clinical Pharmacist  
Inpatient Pharmacy  
Singapore General Hospital



Dr Jasmine Ong is a senior clinical pharmacist at the Singapore General Hospital. She attained her BSc(Pharm)(Hons) and Doctor of Pharmacy degrees from the National University of Singapore. She completed her post graduate pharmacy residency training in critical care and has been involved in interprofessional management of critically ill and burn injury patients since.

Dr Ong is actively involved in clinical research with an interest in drug pharmacokinetics of critically ill and pharmacological modulation of hypermetabolism in burn injury patients. She has presented her research in international conferences and is a co-author of the SGH Burns handbook.

## ORGANISING COMMITTEE

### Ms Seah Pei Fen

Senior Physiotherapist  
Department of Physiotherapy  
Singapore General Hospital



Pei Fen is a Senior Physiotherapist at the Department of Physiotherapy, Singapore General Hospital, with a Master of Science in Burn Care from Queen Mary University of London. She has nine years of working experience in managing patients with Burns injuries and Plastic reconstruction surgeries, both in the acute and outpatient settings.

In 2012, Pei Fen was awarded the Health Manpower Development Plan (HMDP) Fellowship in rehabilitation for burns and reconstructive surgery, which she completed at Shriners Hospital-Galveston, USA. Pei Fen has also been actively involved in numerous burn rehabilitation educational activities and talks.

### Ms Anna Tan

Senior Principal Occupational Therapist  
Occupational Therapy  
Singapore General Hospital



Ms Anna Tan has clinical expertise in Burns and Plastic rehabilitation since 2000. She was awarded 2 HMDP- sponsorships by MOH on Burns Rehabilitation and Pressure Garment fabrication and was instrumental in improving the quality of pressure garment fabrication in SGH.

She was involved in curriculum planning and teaching the SingHealth-Temasek Foundation International Capacity Enhancement for Burns Specialists Training Programme in Dhaka, Bangladesh since 2017. She has also co-authored a chapter in the handbook which formed the teaching material used in the training program. She is a member of the newly established Singapore General Hospital Burns Centre Steering Committee since 2017.

## ORGANISING COMMITTEE

### Ms Emily Tan U-Tong

Senior Medical Social Worker  
Art Therapist  
Singapore General Hospital



Ms Emily Tan U-Tong is a Senior Medical Social Worker and Art Therapist with Singapore General Hospital. She is also a certified Mental Health First Aid (Singapore) Instructor, and an approved International Critical Incident Stress Foundation (ICISF) trainer for both Assisting Individuals in Crisis and Basic Group Intervention courses.

Emily has over 15 years of clinical experience working directly with individuals and groups in diverse fields such as mental health, grief and bereavement, burns, trauma and crisis intervention. Emily is one of the key persons supporting the Burn Support Group Singapore.

### Ms Teng Chai Lian

Senior Nurse Manager  
Major Operating Theatre- Burn Operating Theatre  
Singapore General Hospital



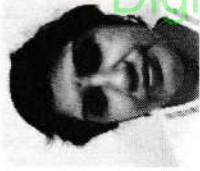
Chai Lian is the Assistant Director Nursing in Singapore General Hospital. She assists Deputy Director Nursing in managing OT processes, is also responsible for quality management and audits in Major and Burn Operating Theatre.

Since 2002, she has coordinated numerous live tele-surgery transmission workshops for ENT and PRAS disciplines from OT to lecture theatre in SGH campus. She has facilitated, coordinated courses for local and oversea delegates since 2013. She is the speaker at the 2nd Singapore Burn Management Update in 2017 and was the author on the "Keynotes in Burns Operative Theatre" in the Handbook for Acute Burn Management handout in 2017.

## ORGANISING COMMITTEE

### Ms Sanda Thangarajoo

Assistant Director Nursing  
Department of Nursing  
Singapore General Hospital



Sanda is the Assistant Director Nursing and she is responsible for leading, directing, planning and assessing the delivery of competent and safe quality patient care of the Emergency Department and the Department of Plastic, Reconstructive & Aesthetic and Burns Centre in Singapore General Hospital.

She is a Midwife by training but has provided leadership and expertise to lead multidisciplinary work in areas like General Medicine, Surgical care and Emergency Department.

However her passion is for Emergency Medicine which is very evident by her enthusiasm on her role in ED. She has done work to improve patient waiting time and have developed and upskilled the nurses in taking up more challenging and outcome based role to improve the patient journey in the ED.

### Ms Yap Chew Theng

Senior Nurse Manager  
Nursing  
Singapore General Hospital



Chew Theng has 20 years of experience in Burn Nursing. She earned her bachelor of Health Science Nursing from the University of Sydney. She went for nursing fellowship and studied her EBN 264 Burns and Plastic Surgery in Queen Victoria Hospital, East Sussex, UK in 2000.

For the past five years, she's overseen nursing care in the Department of plastic, reconstructive & aesthetic and Burn Centre in Singapore General Hospital. She finds satisfaction in helping her patients get their life back to tracks. As a nurturing team leader, she finds it equally rewarding to build a committed team which strives to improve.

# PROGRAMME AT A GLANCE

# PROGRAMME AT A GLANCE

## 15 AUGUST 2019 (THU)

TIME	TOPICS	VENUE
0730 - 0815	Breakfast Symposium - ScarHeal	L1-S1
0800 - 0830	Registration	
0830 - 0840	Opening Ceremony	Auditorium
0840 - 0845	Opening Performance by Burn Support Group	Auditorium
0845 - 0850	Welcome Address by Dr. Chong Si Jack, Organising Co-chairperson, Asia Pacific Burn Congress	Auditorium
0850 - 0900	Opening Speech by Senior Minister of State, Ministry of Health, Dr. Lam Pin Min	Auditorium
0900 - 0920	Plenary Lecture 1: Prof Naleem Moiemmen, President, ISBI Topic: Working Together on Global Burn Challenges	Auditorium
0920 - 1030	Tea Symposium - Smith & Nephew Opening Ceremony for SGH Burn Centre (Invited Guests only)	Auditorium
1030 - 1050	Plenary Lecture 2: Dr Rajeev B. Ahuja, Past President, ISBI and APBA Topic: Limitations in Measuring Burn Outcomes in LMICs and Redimensioning Burn Education to Improve Quality of Care	Auditorium
1100 - 1230	Track 1: Early Excision and Surgical Techniques Track 2: Wound Care Chronic Dressing Track 3: Pediatrics Wound Management 1 Track 4: Surmounting Challenges in Rehabilitation 1 Track 5 Operating Theatre Nursing Track 6: Wound Dressing Workshop for Hospital Care	Auditorium L1-S1 L2-S3/4 L1-S3 L1-S4 L2-PSL 2A/B
1230 - 1330	Lunch Symposium - Mölnlycke Health Care	Whitespace, Level 2
1330 - 1400	Trade Exhibition	
1400 - 1530	Track 7: Tissue Engineering/Skin Substitutes 1 Track 8: Electrical & Chemical Burns Track 9: Psycho-Social Care Track 10: Burns Education Track 11: Free Paper 1 (Medical) Track 12 Nutrition and Metabolism	Auditorium L1-S1 L2-S3/4 L1-S3 L1-S4 L2-S1
1530 - 1600	Coffee Break	
1600 - 1730	Track 13: Critical Care/Resuscitation and Pharmacology Track 14: Reconstruction 1	Auditorium L1-S1

## 15 AUGUST 2019 (THU)

TIME	TOPICS	VENUE
1600 - 1730	Track 15: Nursing Care in Burn Centre Track 16: Tissue Banking Track 17: Burn Care in Pre hospital & Austere Environment Track 18: Scars Management and Pain Control 1	L2-S3/4 L1-S3 L1-S4 L2-S1
1730	End of Day 1	
1830	Faculty and Organising Committee Dinner	

## 16 AUGUST 2019 (FRI)

TIME	TOPICS	VENUE
0730 - 0815	Breakfast Symposium - Urgo	L1-S1
0815 - 0835	Plenary Lecture 3: Prof William G. Cioffi, Past President, ISBI Topic: What We Can Do To Improve Burn Care	Auditorium
0835 - 0915	Plenary Lecture 4: Prof Yann Barrandon, Senior Principal Investigator, SGH Topic: Cell Therapy for Burn Wounds: Challenges Ahead	Auditorium
0815 - 0855	Plenary Lecture 5: Prof Cecilia Li, Professor, PolyU, Hong Kong Topic: Principle of Pressure Therapy on Scar Management- Evidence Based Practice	Auditorium
0915 - 0925	Abstracts Award Presentation by 12th APBC Advisors and Burns & Trauma Editor	Auditorium
0925 - 0955	Coffee Break	
0955 - 1005	Signing of Asia Pacific Burn Association Skin Banking Guidelines	Auditorium
1005 - 1245	Burn Care in Asia Pacific Regional - Sharing by country/region representatives at Auditorium 1. Australia & New Zealand 2. Bangladesh 3. China 4. Hong Kong 5. India 6. Indonesia 7. Japan 8. Malaysia 9. South Korea 10. Taiwan 11. Thailand 12. USA 13. Vietnam 14. Singapore	Auditorium
	Poster Judging	

## PROGRAMME AT A GLANCE

### 16 AUGUST 2019 (FRI)

TIME	TOPICS	VENUE
1245 - 1345	Lunch Symposium - MEBEO International	Whitespace, Level 2
1345 - 1415	Trade Exhibition	Auditorium
1415 - 1545	Track 19: Pharmacology/ Renal Replacement Track 20: Free Paper 2 (Nursing) Track 21: Innovations in Rehabilitation Track 22: Reconstruction 2	L1-S1 L2-S3/4 L1-S3
1415 - 1545	Track 23: Pediatrics Wound Management 2 Track 24: Tissue Engineering/Skin Substitutes 2	L1-S4 L2-S1
1545 - 1615	Coffee Break	
1615 - 1745	Track 25: Free Paper 3 (Medical) Track 26: Basic Sciences Track 27: Epidemiology Track 28: Infection Control and Diseases Track 29: Scar Management and Pain Control 2 Track 30: Surmounting Challenges in Rehabilitation 2	Auditorium L1-S1 L2-S3/4 L1-S3 L1-S4 L2-S1
1815 - 1845	Shuttle to Gala Dinner	
1900	Gala Dinner at Grand Copthorne Waterfront Hotel End of Day 2	

### 17 AUGUST 2019 (SAT)

TIME	TOPICS	VENUE
0900 - 1230	Visit to SGH Burn Centre	
1430 - 1700	Burns Support Group Forum and Art Exhibition Launch	
	End of Congress	

## VENUE INFORMATION

### The Academia, Singapore

20 College Road, Singapore 169856  
(Located in Singapore General Hospital Campus)



Strategically located within the Singapore General Hospital campus, Academia stands as an icon of academic medicine, forming the bridge between clinical service, research and education. The 13-storey two-tower building has been designed to foster a vibrant environment for networking and professional collaboration to advance the diagnosis, treatment and innovative care for patients.

With its strategic location and modern conference facilities, Academia regularly hosts renowned medical conferences and workshops. Its facilities include an Auditorium with seating capacity of 444 people, multiple Seminar Rooms, exhibition areas and informal meeting spaces.

### Getting Here

#### By Public Transport

Nearest MRT Station: Outram Park

#### Nearest Bus-stops:

Bus Stop	Location	Bus Numbers
Bus Stop A	Jalan Bukit Merah	SBS Transit: 147, 196, 197 SMRT: 167, 961
Bus Stop B	Kampong Bahru Road	SBS Transit: 124, 143, 147, 166, 196, 197 SMRT: 61, 167, 961
Bus Stop C	New Bridge Road Bus Terminal	SBS Transit: 2, 12, 54, 62, 103, 174, 196 SMRT: 61, 190, 520, 961
Bus Stop D	Before Outram Road	SBS Transit: 124, 143, 147, 166, 197 SMRT: 61, 961
Bus Stop E	Along Outram Road	SBS Transit: 33, 63 SMRT: 75, 851, 970

SGH shuttle service is available from the following bus-stops:

- Bus-stop opposite Outram Park MRT station (East-West Line) along Outram Road
  - Bus-stop outside Outram Park MRT station (North-East Line) along Eu Tong Sen Street
- Thereafter, alight at Singapore National Eye Centre (SNEC) and cross the road to Academia.  
Note: The shuttle service operates from Monday to Friday, 8.00 am to 7.00 pm.

## VENUE INFORMATION

## FLOORPLAN FOR TRADE EXHIBITION

### By Car

We would recommend delegates not to drive to the conference venue. Please note that there are no parking facilities within the Academia building premises.

However, if you are driving, you may refer to the carpark locations below (and as indicated in letter P in map below).

Carparks	Location	Carpark charges
<b>Multi-Storey Carpark H*</b>	End of MacAlister Road, behind College of Medicine Building (Ministry of Health).	Mon to Sat (7.00am - 9.59pm): \$0.018 per minute/\$1.08 per hour Mon to Sat (10.00pm - 6.59am): \$2.14 per entry
<b>National Heart Centre Car Park</b>	National Heart Centre Singapore, 5 Hospital Drive (opposite SGH Block 4).	Mon to Sat (7.00am - 9.59pm): \$0.036 per minute/\$2.16 per hour Mon to Sat (10.00pm - 6.59am): \$2.10 per entry
<b>Carpark C</b>	In front of Bowyer Block (Beside SGH Block 4)	Monday to Saturday (7.00am - 9.59pm): \$0.036 per minute/\$2.16 per hour
<b>Carpark E</b>	Opposite SGH Block 2 & 3	
<b>Carpark I</b>	Behind Diabetes & Metabolism Centre	

^ Carpark I & part of Carpark C are designated as Valet Parking (weekdays 8am to 6pm). A \$3 fee will apply for Valet Parking services. Normal parking fees apply on top of the Valet Parking fees.

\* If you park at Carpark H, take the free shuttle service from Carpark H to SGH Block 4, then walk to Academia. Shuttle bus timings:

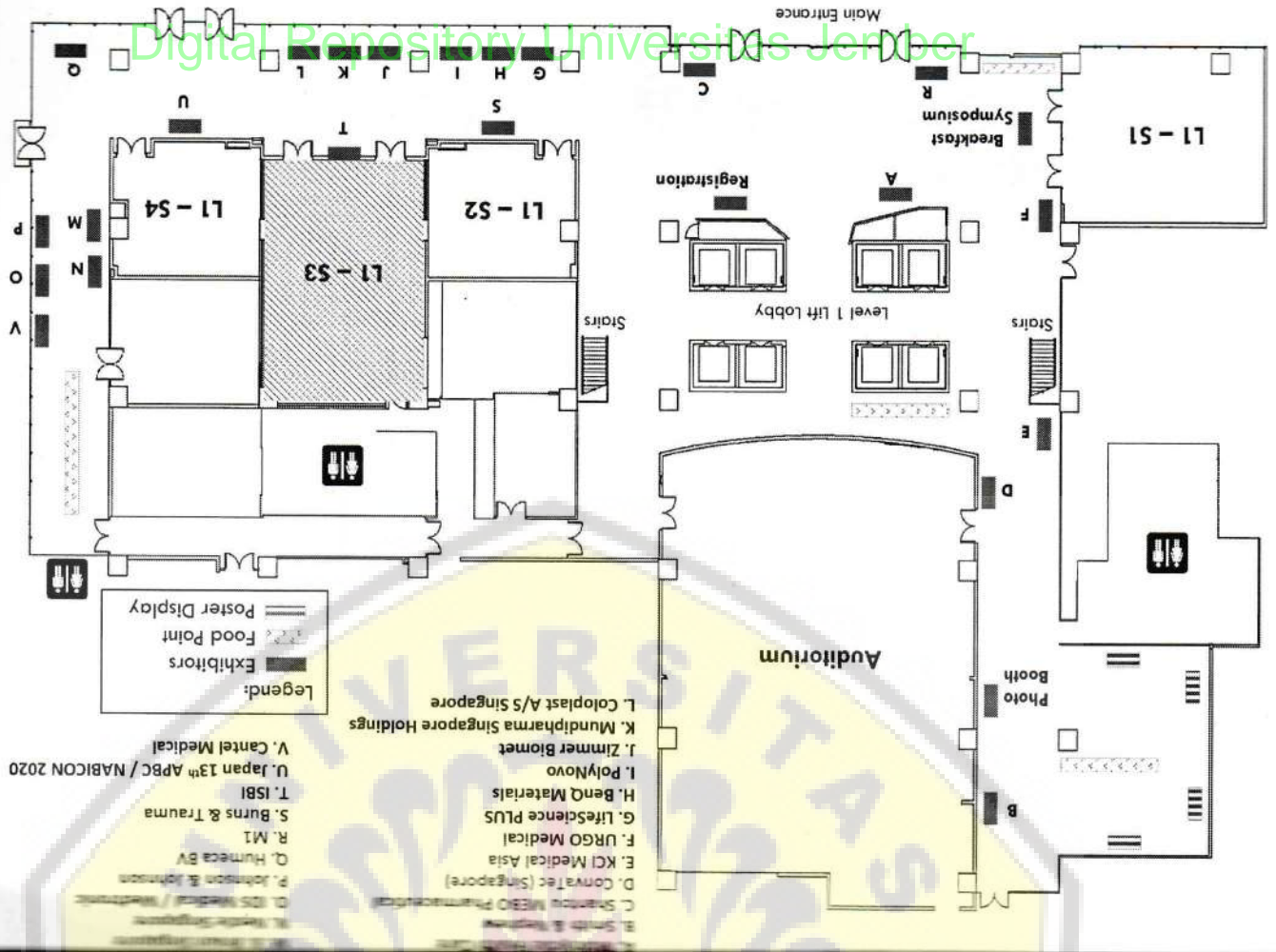
**Mondays to Fridays**  
6.00am to 10.30pm - Approx. 10 mins intervals  
First bus: 6.00am  
Last bus: 10.10pm

**Saturdays**  
6.00am to 2.00pm - Approx. 10 mins intervals



First bus: 6.00am  
Last bus: 1.40pm

- Legend:**
- Exhibitors
  - Food Point
  - Poster Display
- V. Japan 13<sup>th</sup> APBC / NABICON 2020  
 U. Cintel Medical  
 T. ISBI  
 S. Burns & Trauma  
 R. M1  
 Q. Humeica BV  
 P. Johnson & Johnson  
 O. DS Medical / Medtronic  
 N. Medtronic  
 M. Medtronic  
 L. Coloplast A/S Singapore  
 K. Mundipharma Singapore Holdings  
 J. Zimmer Biomet  
 I. PolyNovo  
 H. BenQ Materials  
 G. Lifescience PLUS  
 F. URGO Medical  
 E. KCI Medical Asia  
 D. CorvaTec (Singapore)  
 C. Shantha Medco Pharmaceuticals  
 B. Smith & Nephew



## RECONSTRUCTION 4240

### RECONSTRUCTION OF NOSTRIL STENOSIS AFTER SKINGRAFT NASAL ON SEVERE FACIAL BURN USING CARTILAGE GRAFT, VESTIBULAR FLAP AND NASAL STENT

Ulfa Elfiyah

Departement of Plastic Surgery, Medical Faculty, Jember University, Indonesia

**Background:** Reconstruction of nostril stenosis after burn is very challenging cause the nose is central position with the most difficult anatomical unit. The goal of reconstruction is to emulate the lobule-columella-ala complex anatomically create adequate nostrils and maintain long term patency so that it is expected to improve psychological and social impact for the patient.

**Materials and Methods:** Female, 16 years old with a history of facial burns and undergoes skin grafting in the area of the nose and around the mouth. Since 3 years ago the nostrils began to shrink and in the last 3 months before examination the plastic surgeon the patient felt more difficult to breathe, felt tight so that it disrupted the activity. Physical examination shows that there is blockage in the nostril area as a result of the growth of scar tissue, which changes the anatomic structure of the tip area of the nose. Changes in structure are also affected by the scar traction around the mouth that extends to the right and left edges of the nose. This operation is underwent general anesthesia. Stenosis segments were incised and rotational vestibular flap was inserted to the alar rim and inner nostril lining as defined by Bozkurt (2012). Cartilage grafts obtained from the ipsilateral auricular conchae were placed between the outer nasal skin and inner vestibular flap to produce structural support. The nostril base side defect is closed with a nasolabial scar flap with z plasty design. Nasal stent is using to prevent collaps of nostril and maintain the size of the nostril after surgery.

**Results:** Evaluation results 3 months postoperative patients feel satisfied, adequate breathing and nose shape is relatively more acceptable

**Conclusion:** Cartilage graft with modified vestibular flap and nasal stent post-surgery is an effective and safe alternative for reconstruction of nostril stenosis after severe facial burn

## RECONSTRUCTION 4987

### POST BURN NECK CONTRACTURE: AN ALGORITHM FOR CHOOSING THE IDEAL SURGICAL METHOD OF MANAGEMENT

MEDHAT SAMY HASSAN

Department of Plastic, Reconstructive and Burn Surgery, Faculty of Medicine, Menoufia University, Shebin ElKhm, Menoufia, Egypt

**Background:** Any post burn neck contracture usually causes severe impairment of function and esthetics, which causes severe shortage in productivity of these patients in addition to serious psychological and social problems. That's why it is very important to sub-categorize this type of deformity by anatomical location and cause of burn to allow choosing the ideal method of surgical management. A lot of surgical procedures have been described for correcting post burn neck contractures, but to assess the suitability of these techniques for each patients would be very tricky. My algorithm system was made after accurate observations and applications to facilitate this issue.

**Materials and Methods:** This study included 30 patients of post burn neck contracture deformities operated at the plastic and reconstructive surgery department, Menoufia university, Egypt between march 2017 to march 2019, these patients were analyzed according to certain parameters These parameters included: age of the patient, The condition of skin at the contracture site, range of sternomastiod muscles movement at both sides of the neck, extent of the damage caused by the previous burn and general condition of the patient. Method of management was tailored according to the data collected previously and the score given. Methods of management included grafts localized random surgical solutions, axial flaps from surrounding areas and axial flaps from distal areas. Accurate and close follow up for each patient was done to evaluate suitability of lines of management performed to the categories and scores given by the algorithm system.

**Results:** According to parameters given, patients with high scores (grade 1) were suitable for multiple Z release and small random localized flaps, patients with lesser scores (grade 2) were suitable for flaps from the surrounding areas of the neck, lesser scores (grade 3) were suitable for axial flaps from distant areas, and the lowest scores (grade 4) did skin grafts. 25 patients showed great satisfaction to their post operative's outcomes and the rest were quite satisfied especially those in grade 4. Patient satisfaction was high. Complications occurred in about 4 patients which did secondary corrections and were satisfied after.

**Conclusion:** When we apply Patients with post burn neck contractures to my algorithm system according to certain parameters, It will be easy to choose the ideal method of management and gain the best surgical results possible.

Reconstruction of nostril stenosis after skingraft nasal on severe facial burn using cartilage graft , vestibular flap and nasal stent

Ulfa Elfiah



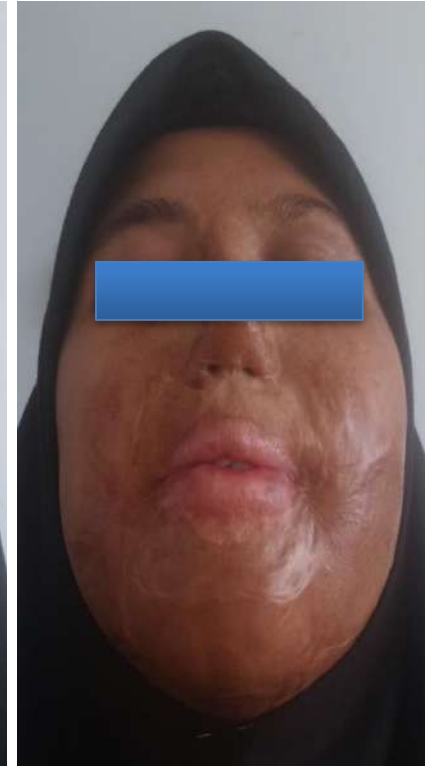
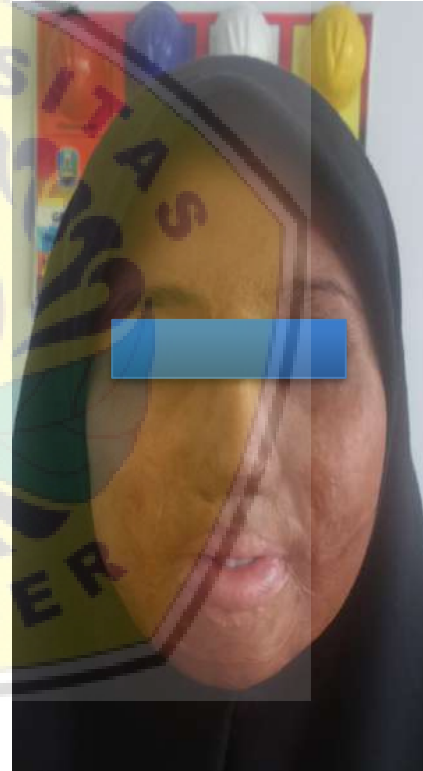
- The nostril stenosis may result from tissue loss, scarring and contracture formation after burn injury
- The deformity can affect the facial profile and balance (Daya, 2009).
- Reconstruction of nostril stenosis is very challenging because the nose is central position with the most difficult anatomical unit (Bouguila et al., 2017) .



- The goal of reconstruction are:
  - to emulate the lobule-columella-ala complex anatomically,
  - To create adequate nostrils and maintain longterm patency
  - it is expected to improve psychological and social impact for the patient

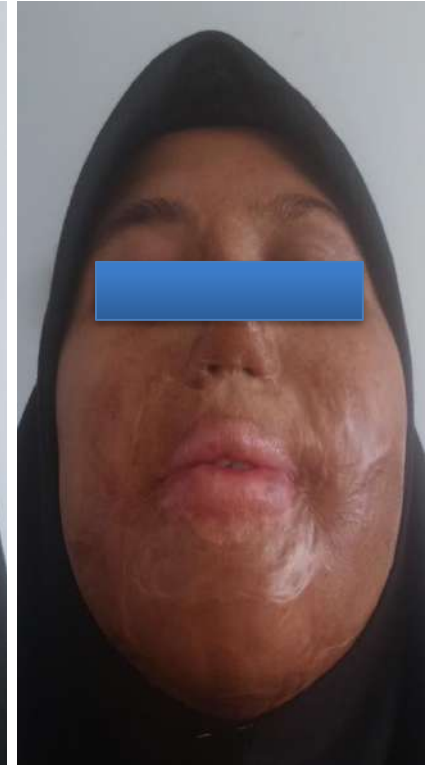
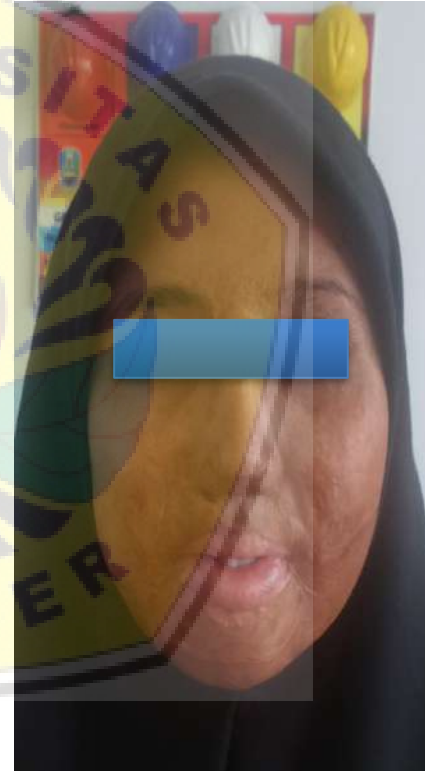
# CASE REPORT

- Female, 16 years old with:
  1. a history of facial burns due to fall into hot cooking oil at the age of 8 years.
  2. undergoes several operations and the last action was skin grafting in the area of the nose and around the mouth.
  
- since 3 years ago the sufferer felt the nostrils began to shrink and in the last 3 months she felt more difficult to breath, so that it disrupted the activity



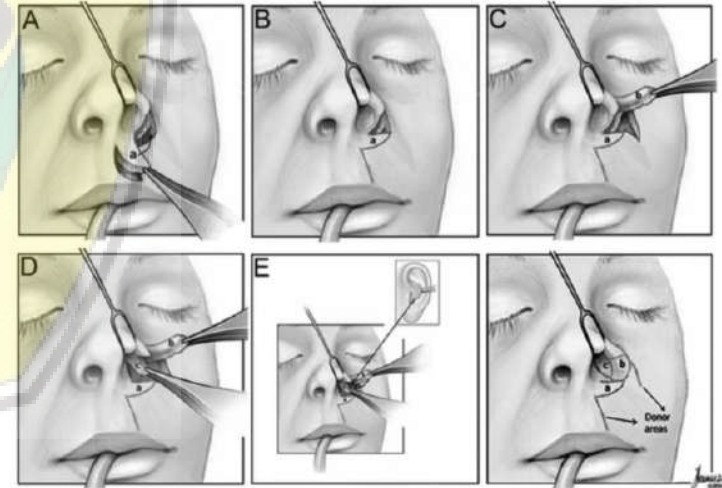
# CASE REPORT

- Physical examination showed:
  1. There was blockage in the nares area as a result of the growth of scar tissue, which changed the anatomic structure of the tip area of the nose.
  2. Changes in structure are also affected by the scar traction around the mouth that extended to the right and left edges of the nose.



# Operating Technique

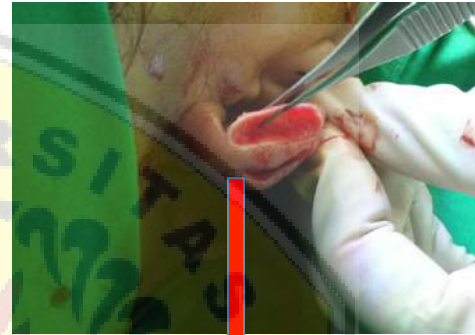
- This operation was undertaken general anesthesia.
- Stenotic segments were incised and rotational vestibular flap was inserted to the alar rim and inner nostril lining as defined by Bozkurt (2012).



Preoperative

# Operating Technique

- Cartilage grafts obtained from the ipsilateral auricular conchae were placed between the outer nasal skin and inner vestibular flap to produce structural support.
- The nostril base side defect was closed with a nasolabial scar flap with z plasty design
- Nasal stent was using to prevent collaps of nostril and maintain the size of the nostril after surgery



# Post Operative

- Evaluation results one week until three months post operatively
- Patients felt satisfied, adequate breathing and nose shape is relatively more acceptable



One week post operative



Three months post operative

# Discussion

- The treatment of a burned nose presents somewhat different problem from burns other parts of the body .
- Secondary nasal reconstruction is based on an assessment of the residual functional and cosmetic problems

# Discussion

- When the supporting structures of are a destroyed, total or subtotal nasal reconstruction is indicated (Kostrubala, 1952)
- Many techniques have been described to reconstruct nasal alae in burns patients, but none of them are completely satisfactory



# Discussion

- In this patients, Cartilago grafts from the auricula and modified the vestibular flap defined by Bozkurt and also local flaps are other alternatives for partial stenosis or near-total nostril stenosis accompanied by limited tissue loss may be reconstructed with these alternatives.(Copcu, 2005)(Bozkurt, Kapi, Kuvat, & Selçuk, 2012)

# Discussion

- Nasal stenting after nostril reconstruction can assist the scar maturation process, leaving softer remodelled scars.
- The scar improvement that was noted probably resulted from the pressure transmitted on to it by the serial increase in the size of the stent (Daya, 2009)

# Conclusion

- We observed in our case, cartilage graft with modified vestibular flap and nasal stenting post surgery is an effective and safe alternative for reconstruction of nostril stenosis which also leads to formation of structural support for preventing post operative restenosis



# Reference

- Ann-Burns-and-Fire-Disasters-28-121. (n.d.).
- Bouguila, J., Ho Quoc, C., Viard, R., Brun, A., Voulliaume, D., Comparin, J. P., & Foyatier, J. L. (2017). Nose burns: 4-dimensional analysis. *European Annals of Otorhinolaryngology, Head and Neck Diseases*. <https://doi.org/10.1016/j.anorl.2017.02.014>
- Bozkurt, M., Kapi, E., Kuvat, S. V., & Selçuk, C. T. (2012). Repair of nostril stenosis using a triple flap combination: Boomerang, nasolabial, and vestibular rotation flaps. *Cleft Palate-Craniofacial Journal*. <https://doi.org/10.1597/11-021>
- Copcu, E. (2005). Reconstruction of total and near-total nostril stenosis in the burned nose with gingivo-mucosal flap [3]. *Burns*. <https://doi.org/10.1016/j.burns.2005.04.025>
- Daya, M. (2009). Nostril stenosis corrected by release and serial stenting. *Journal of Plastic, Reconstructive and Aesthetic Surgery*. <https://doi.org/10.1016/j.bjps.2007.11.066>
- Kostrubala, J. G. (1952). Burns of the nose. *The American Journal of Surgery*, 83(5), 617–618. [https://doi.org/10.1016/0002-9610\(52\)90292-4](https://doi.org/10.1016/0002-9610(52)90292-4)



APBC 2019 SINGAPORE  
BURN CARE EXCELLENCE THROUGH  
MULTIDISCIPLINARY TEAM WORK

# Certificate of Participation

*awarded to*

**Ulfa Elfiah**

*For participating as Abstract Oral Presenter at*

**12th Asia Pacific Burn Congress**

14<sup>th</sup> – 17<sup>th</sup> August 2019

---

**A/Prof Ong Yee Siang**  
Co-chair,  
12<sup>th</sup> Asia Pacific Burn Congress

---

**Dr Chong Si Jack**  
Co-chair,  
12<sup>th</sup> Asia Pacific Burn Congress