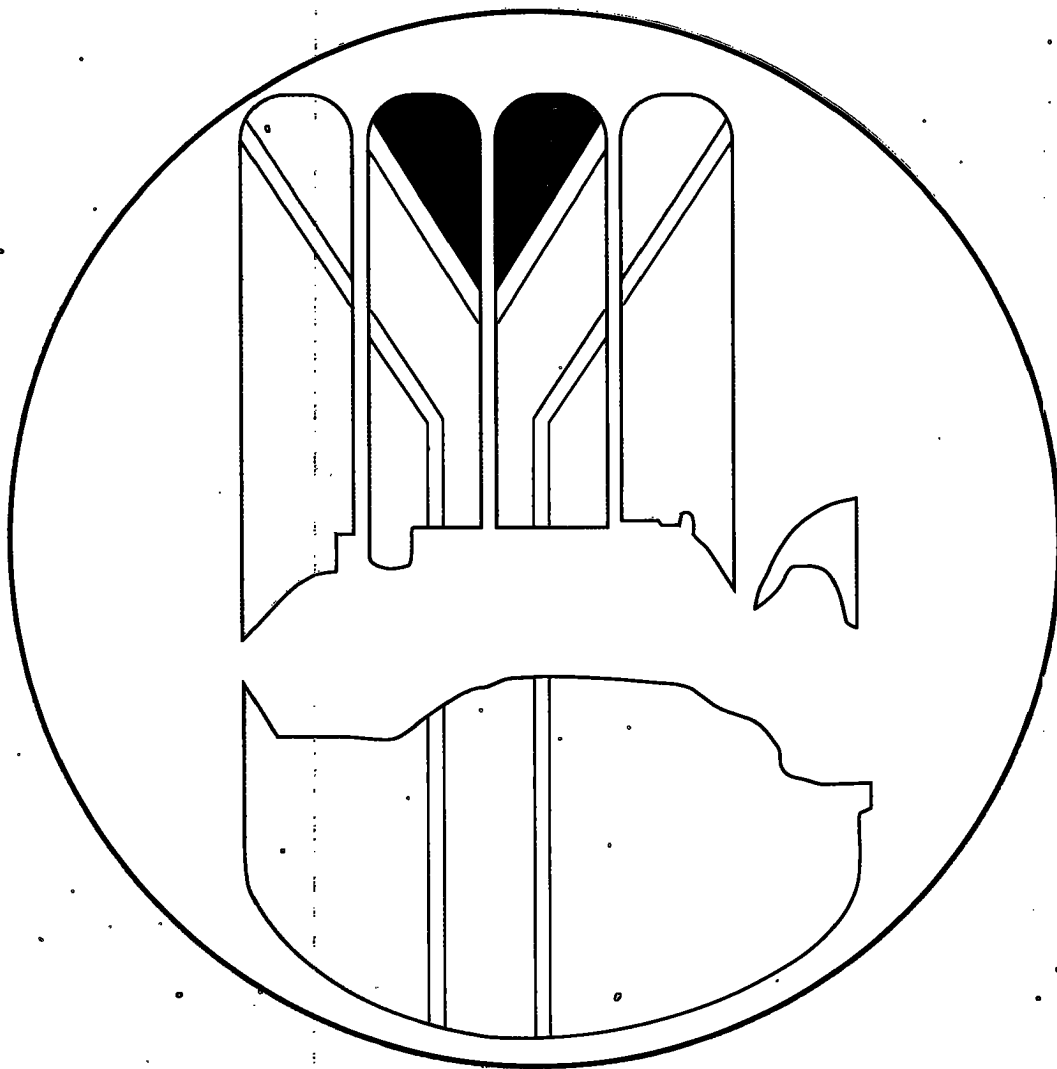


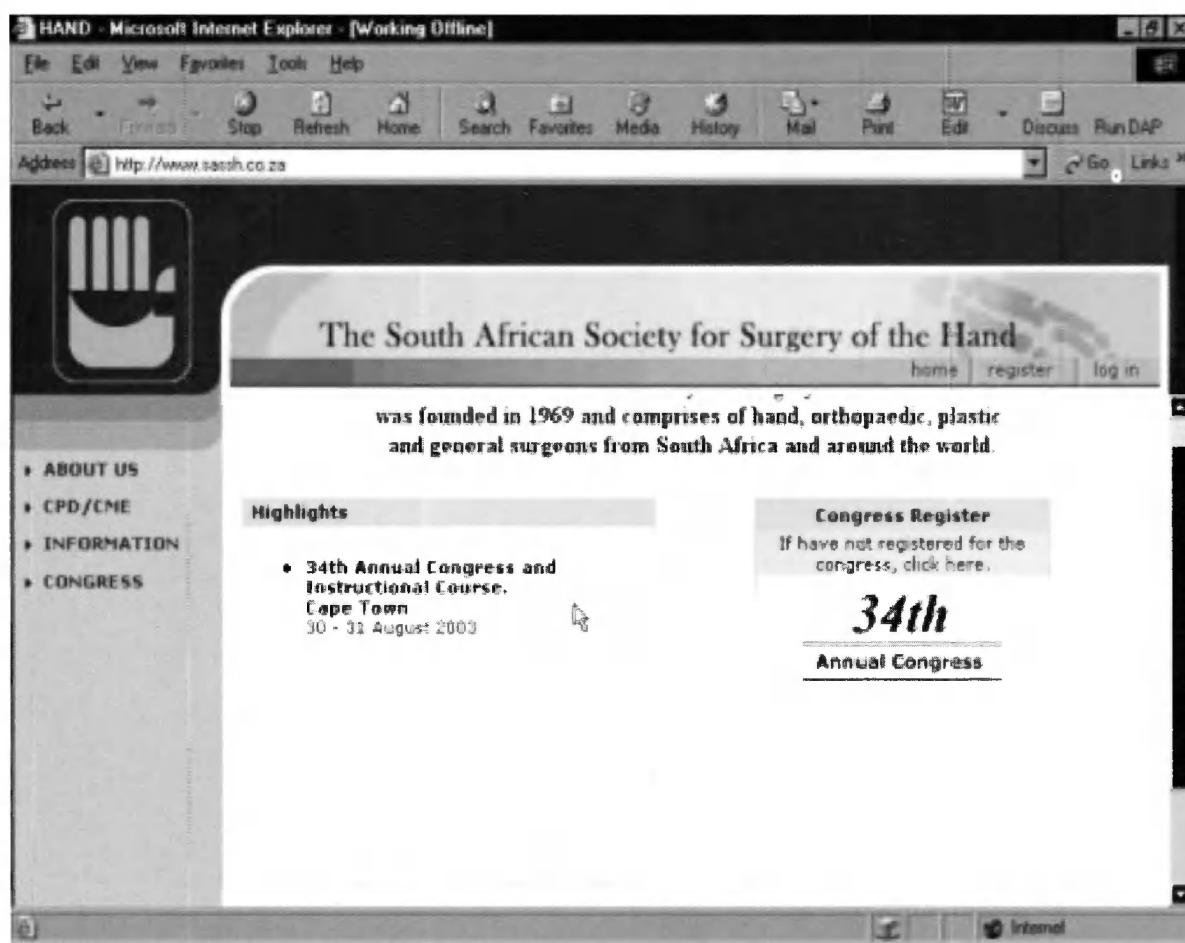
The South African Society for Surgery of the Hand



34 Congress
30 - 31 August
Cape Town
2003

Visit our South African Society for Surgery of the Hand Website

<http://www.sassh.co.za>



THE SOUTH AFRICAN SOCIETY
for
SURGERY
of the HAND

DIE SUID-AFRIKAANSE VERENIGING
vir
HANDCHIRURGIE



Congress 34 Kongres

30 - 31 August 2003
CAPE TOWN

WELCOME MESSAGE



DR JJ van WINGERDEN
PRESIDENT
THE SOUTH AFRICAN SOCIETY FOR
SURGERY OF THE HAND

I would like to bid you a hearty welcome to the Mother City of South Africa where we are gathered to taste, discuss, ruminate on and digest the fruits of labour from both the clinic and the laboratory.

“Le travail, c’est amusant”, Maurice Chevalier proclaimed during a gala performance celebrating his 80th birthday to which one of my most respected mentors, Professor George Dommissie, applying Socratic logic, responded: “Work is fun, research is work, therefore research is fun”. Personally I believe that the joy of research and discovery is but one part of the fun - the other part is in sharing the results with your colleagues.

In 1652 the first Hollander of note landed on the southern tip of Africa not far from here, and this year we are greatly honoured to welcome Professor Steven Hovius, also from Holland, as our official invited, international guest. Professor Hovius of Rotterdam has become a prominent figure in Hand Surgery in the last number of years and has proven himself to be a worthy successor to Esser, Koch, Huffstadt and Van der Meulen.

We are also very grateful to Professor Brian Adams from Iowa, USA, for agreeing to share with us his experience, especially in replacement arthroplasties.

A special word of thanks is due to Dr Martin Wells and his organizing committee, Ms Hendrika van der Merwe as well as Professor Anton van Niekerk, Esther Mahlangu and the Trade - all who have worked extremely hard to make this an auspicious occasion.

THE TRADITION OF RESPECTFUL ARGUMENT

JAMES P SHANNON*

One mark of an educated man is his ability to differ without becoming angry, sarcastic or discourteous. Such a man recognizes that in contingent matters there will always be a place for legitimate difference of opinion.

He knows that he is not infallible, he respects the honesty and the intellectual integrity of other men and presumes that all men are men of integrity until they are proven to be otherwise.

He is prepared to listen to them when their superior wisdom has something of value to teach him. He is slow to anger and always confident that truth can defend itself and state its own case without specious arguments, emotional displays of personal pressures.

This is not to say that he abandons his position easily. If his be a disciplined mind, he does not lightly forsake the intellectual ground he has won at great cost. He yields only to evidence, proof or demonstration.

He is neither angered nor shocked by new evidence of public vulgarity or blindness. He is rather prepared to see in these expected human weaknesses compelling reason for more compassion, better rhetoric, stronger evidence of his part. He seeks always to persuade and seldom to denounce.

The ability to defend one's position with spirit and conviction; to evaluate accurately the conflicting opinions of others and to retain one's confidence in the ultimate power of truth to carry its own weight, are necessary talents in any society, but especially so in our democratic world.

In our day and in our land, there is some evidence that these virtues are in short supply. The venerable tradition of respectful argumentation, based on evidence, conducted with courtesy, and leading to the exposition of truth, is a precious part of our heritage in this land of freedom. It is the duty of educated men to understand, appreciate and perpetuate this tradition.

Reference:

Shannon JP, 1976. The Tradition of Respectful Argument.
In Controversy in Surgery. Varco RL and Delaney JP eds. WB Saunders Company.

* Former Executive Director of the Minneapolis Foundation, Minneapolis, Minnesota

WELCOME MESSAGE



DR MC WELLS
CONGRESS CHAIRMAN
THE SOUTH AFRICAN SOCIETY FOR
SURGERY OF THE HAND

I warmly welcome you all to Cape Town.

Let us enjoy the opportunity for learning and the sharing of research and clinical experience in hand surgery. We look forward to the valuable contribution by Professor Steven Hovius of Rotterdam. We also welcome Professor Brian Adams of Iowa and thank him for his instructional lectures.

I hope that you and your partner will enjoy this, our 34th annual congress, and that the social program will present you with the opportunity to meet new friends and refresh old friendships.

We wish to welcome and thank the sponsoring companies with their trade exhibitions; they have always made an important contribution to our congresses and I therefore trust that you will pay each one of them a visit.

We encourage you to explore the art route at our trade exhibition and get yourself a commemorative poster.

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INTERNATIONAL VISITORS



PROF DR S HOVIUS
OFFICIAL GUEST SPEAKER

Professor and Head of the Department of Plastic and Reconstructive Surgery, University Hospital Rotterdam, and Head of the Research Institute of Plastic and Reconstructive Surgery, Erasmus University. He studied for Medical Doctor at Free University, Amsterdam, trained in General Surgery at Academic Medical Centre in Amsterdam. He trained in Plastic Surgery at University Hospital Rotterdam (educated by Prof Dr JC van der Meulen). He is a member of The Netherlands Society for Surgery of the Hand, The British Society for Surgery of the Hand, Federation of the European Societies for Surgery of the Hand (FESSH) and the International Federation of Societies for Surgery of the Hand (IFSSH). He was Editorial Board Member of The Journal of Hand Surgery, British and European volume (1995-2001). He has organized and taught at multiple courses. He has published 35 (first author) and co-authored 77 publications. His main areas of research interest are microvascular surgery, congenital differences, peripheral nerve injuries and regeneration, and woundcare.



BRIAN D ADAMS, MD

Professor of Orthopaedic Surgery, University of Iowa College of Medicine. Post-graduate Education at Creighton University, Omaha, Nebraska and University of Iowa College of Medicine. Fellowship in Hand and Microsurgery Loma Linda University, California (1988). He is Associate Editor of the Journal of the American Academy of Orthopaedic Surgeons; Editorial Board Consultant for Journal of Hand Surgery; Editorial Consultant for C O R R. His areas of Research Interest are total wrist arthroplasty, distal radioulnar joint, implant arthroplasty for finger joints, functional motion analysis of wrist and fingers, distal radius fractures, flexor tendon repair. He has been a presenter or chair at 89 educational conference presentations since 1993. He is recipient of 15 grants and awards and has published 27 peer reviewed publications, with 5 in review.

PAST PRESIDENTS / VORIGE PRESIDENTE

1969 - 1971	I Kaplan
1971 - 1973	AC Boonzaier
1973 - 1975	M Singer
1975 - 1977	JH Youngleson
1977 - 1979	TL Sarkin
1979 - 1981	CE Bloch
1981 - 1983	SL Biddulph
1983 - 1985	WMM Morris
1985 - 1987	LK Pretorius
1987 - 1989	KS Naidoo
1989 - 1991	SL Biddulph
1991 - April 1992	BJ van R Zeeman
April 1992 - 1993	SL Biddulph
1993 - 1995	JH Fleming
1995 - 1997	U Mennen
1997 - 1999	EJ Bowen-Jones
1999 - 2001	LT de Jager

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Immediate Past President / Pas Uitgetrede President	LT de Jager
President Elect / Aangewese President	M Carides
Honorary Secretary / Treasurer / Ere-Sekretaris / Tesourier	TLB le Roux
Members / Lede	U Mennen M Wells
Executive Secretary / Uitvoerende Sekretaresse	H van der Merwe

Office	PO Box 2281, Bellville 7535
	Telephone 021 9103322
	Fax 021 9103838
	Website http://www.sassh.co.za
	Email sassh@iafrica.com

CONGRESS 2003 ORGANIZING COMMITTEE KONGRES 2003 ORGANISERENDE KOMITEE

Chairman / Voorsitter	Martin Wells
Congress Co-ordinator / Kongreskoördineerder	Hendrika van der Merwe

ANNUAL GENERAL MEETING ALGEMENE JAARVERGADERING

SATURDAY 30 AUGUST 2003

16:15 - 17:15

(Members only/Lede alleenlik)

PRESIDENT HOTEL, BANTRY BAY, CAPE TOWN

1

Welcome Address by the President ✓
Verwelkoming deur die President ✓

2

Apologies and Proxies ✓
Verskonings en Volmagte ✓

3

Minutes of the Previous Annual General Meeting ✓
Notule van die Vorige Algemene Jaarvergadering ✓

4

Matters Arising from the Minutes ✓
Sake wat uit die Notule Voortspruit ✓

5

President's Report ✓
President se Verslag ✓

6

Honorary Secretary / Treasurer's Report ✓
Ere-Sekretaris / Tesourier se Verslag ✓

7

Proposed Increase in Entrance Fee and Annual Subscription ✓
Voorgestelde Verhoging in Intreefooi en Jaargeld ✓

8

Announcement of Executive Committee ✓
Aankondiging van Uitvoerende Komitee ✓

9

Membership ✓
Lidmaatskap ✓

10

General
Algemeen

11

Next Annual General Meeting
Volgende Algemene Jaarvergadering



Ass. of 145 160
Members 285
50



<p>SOCIAL EVENTS SOSIALE BYEENKOMSTE</p>
--

ACCOMPANYING PERSONS' PROGRAMME

30 August 2003
Visit to Art Museum
Depart 10:15
Main Foyer, President Hotel

SASSH DINNER

30 August 2003
19:00 for 19:30
Simon van der Stel Room
The Castle
Cape Town

Dress: Smart Casual

Bus departs at 18:40 sharp
Main Entrance, President Hotel

AUCTION OF ART WORK FOLLOWS DINNER

<p>2004 COURSES AND CONGRESSES 2004 KURSUSSE EN KONGRESSE</p>

1. SASSH Annual Refresher Course
March 2004
Durban
(Details to follow)
2. 35th Annual Congress and Instructional Course
4 - 5 September 2004
Pretoria

Invited International Speaker: Dr Marc Garcia-Elias from Barcelona, Spain

GENERAL INFORMATION ALGEMENE INLIGTING

Pf. type

*"Histic" Narcissism.
Obsessive-compulsion
Paranoia
Anti-social.
Dependent
"Normal" ←
Paul W Brown 1991*

Congress Venue	President Hotel, Bantry Bay, Cape Town
Cell Phones / Bleepers	All cell phones and bleepers should be turned off during conference sessions
CPD Accreditation	The Congress Committee has applied for accreditation and certificates will be posted
Exhibitors	Companies and suppliers will exhibit their newest innovations in the Exhibition Hall, Basement of the Hotel. You will have ample opportunity to visit the exhibition during refreshment breaks
Information Desk	Please feel free to visit the Information Desk should you require any assistance
Language	The official language of the congress will be English. No simultaneous translation service will be provided
Name Tags	Name tags should be worn by all delegates at all times during the congress
Pre-view Room	The pre-view room is situated in the Boardroom opposite the Auditorium
Smoking	In accordance with new Government Legislation regarding smoking in public areas, kindly note that this venue is a non-smoking area
Teas and Lunches	Will be served in the trade exhibition area
Parking	Ample parking is available at the venue

*✓ ? Function vs. Outcome Based Measurements
PBB, Strickland, TAM, B-y, etc.*

- "Protein and Cellular edema"
- Fibonacci curve (cf. skull)
- Test for Boutonniere I: can extend DIP when DIP is flexed.

34th ANNUAL CONGRESS AND INSTRUCTIONAL COURSE
30 - 31 AUGUST 2003
THE PRESIDENT HOTEL, BANTRY BAY, CAPE TOWN

SCIENTIFIC PROGRAMME

FRIDAY 29 AUGUST 2003

17:30 onwards Cape Wine and Cheese Evening
 Venue: Exhibition Area at The President Hotel, Bantry Bay

SATURDAY 30 AUGUST 2003

07:15-07:55 Registration
 07:55-08:00 Welcome and Announcements by Dr J van Wingerden, President: SASSH

SESSION 1 CHAIRMAN: DR J VAN WINGERDEN

~~08:00-08:10~~ A Multi-Center, Randomized, Double Blind Clinical Trial of Teno Fix (- A Tendon Fixation Device for Flexor Tendon Repair: Drs M Solomons, A Barrow, T Senoge
~~08:10-08:20~~ Clinical Experience with a New Tendon Fixation Device using an Accelerated Active Motion Protocol: Drs M Solomons, S Carter, Ms A Catchpole, Drs M Rosenwasser, E Diao
~~08:20-08:30~~ Discussion
~~08:30-08:55~~ The Treatment of Extensor Lesions - An Overview: Prof S Hovius
~~08:55-09:05~~ Discussion
~~09:05-09:15~~ Flexor Tendon Injuries: What is a Good Result? Drs P Rowe, M Solomons
~~09:15-09:20~~ Discussion
~~09:20-09:35~~ PIP Joint Contractures - Hand Therapy for Successful Results: Ms L Pringle
~~09:35-09:40~~ Discussion
~~09:40-09:55~~ Operative Treatment of Phalangeal Fractures: Prof S Hovius
~~09:55-10:00~~ Discussion

10:00-10:30 TEA

SESSION 2 CHAIRMAN: PROF U MENNEN

~~10:30-10:40~~ Intra-Arterial Substance Injection: Prof N Maritz
~~10:40-10:45~~ Discussion
~~10:45-11:05~~ Long Term Follow-up of Patients with Ischaemic Contracture of Volkmann: Prof S Hovius (11+2=13. 4. Omar)
~~11:05-11:10~~ Discussion
~~11:10-11:20~~ Dupuytren's Contracture - A 5-year Personal Audit: Dr E Bowen-Jones.
~~11:20-11:25~~ Discussion
~~11:25-11:35~~ Percutaneous Release of Trigger Fingers: Drs KG Adams, C Pienaar, M Solomons, S Carter, M Singer
~~11:35-11:40~~ Discussion
~~11:40-11:50~~ Hyperostotic Macroductyly: Dr W Stuart Dr Mokeke - osteocartilaginous
~~11:50-11:55~~ Discussion plaque
~~11:55-12:15~~ Is there a future for Intra-uterine Surgery for Congenital Upper Limb Differences?: Prof S Hovius pericardial
~~12:15-12:25~~ Discussion Apoptosis = cell death between fingers

12:25-13:20 LUNCH

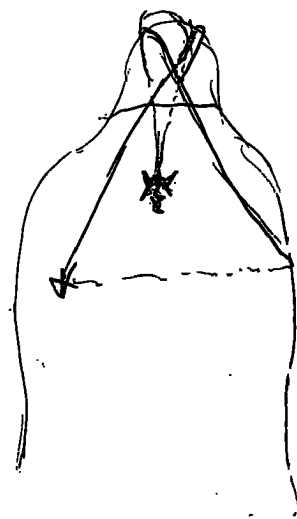
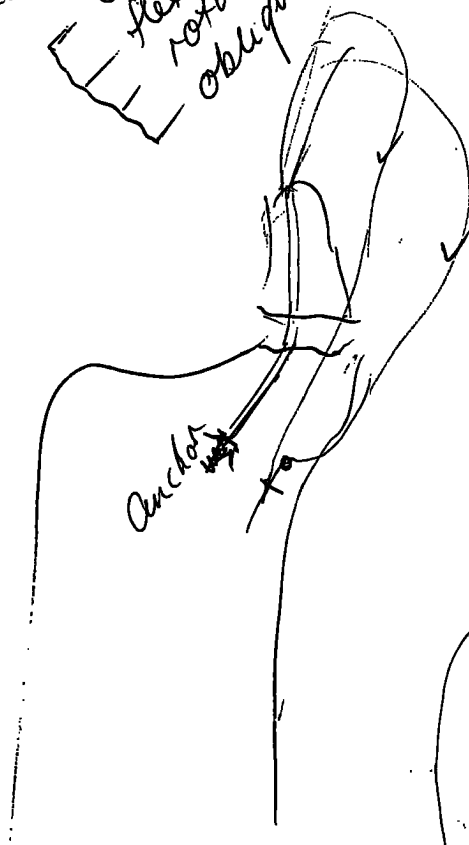
SESSION 3 CHAIRMAN: DR J MULLER

~~13:20-13:30~~ An One-stage Shoulder Arthrodesis and Biceps Tendon Transfer for Upper Brachial Plexus Injuries: Drs M Cvitanich, M Solomons Brock-Sedon
~~13:30-13:35~~ Discussion Sitanich
~~13:35-13:50~~ Predictors for Return to Work after Median and Ulnar Nerve Injuries of the Forearm: Prof S Hovius

deformed on US.
S2 only 8 served. - 1 = N, 7 = abn.

NOTES

Supin / Pron - vs. ulnar replacement
 in, relat. to ulna
 rotation stresses!!
 [uln/rad. dev.
 flex/ext
 rotation (pron/sup)
 oblique = combined]



I do my best
 The HT's does the rest ? !

Relat. offset.
 radial +
 pressure dist. ulna
 full seat dist
 rad and carp
 do not cross. CM
 carpal "mass" is
 lesion bloc
 non cemented
 (interlock screws)

Lpd.

Evaluating peripheral nerve injuries QUESTIONNAIRE

What tests do you do for sensory recovery?

Daily practice

Ideally

What tests do you do for motor recovery?

Daily practice

Ideally

Do you perform electrophysiological tests or other special investigations postoperatively?

How often do you do them?

How do you use the outcome of these tests for clinical decision-making?

Do you use hand therapy and sensory re-education?

*Psych. stress was an indicator of clinical outcome
 — 2 nerve injury (N. uln + med) very high stress score*

- ~~13:50-14:00~~ Psycho-social Stress and Forearm Nerve Injuries: Prof S Hovius
~~14:00-14:10~~ Discussion
~~14:10-14:20~~ The Diabetic Hand: Prof N Maritz *Gill Land Jan 1998. Tropical Diabetes Africa*
~~14:20-14:25~~ Discussion *Akintewe Nigeria. 1984.*
~~14:25-14:35~~ — Efficacy of the Post-Operative Pain Pump in Hand Surgery: Dr W Stuart *Rob Burrows*
~~14:35-14:40~~ Discussion
~~14:40-14:45~~ Introducing the SASSH Website: Dr M Carides *sassh.co.za*
 14:45-15:15 TEA
- SESSION 4 CHAIRMAN: DR M WELLS**
~~15:15-15:25~~ — Mycobacterium Tuberculosis Infection of the Wrist: Drs M Cvitanich, M Solomons
~~15:25-15:30~~ Discussion
~~15:30-15:40~~ . The Simultaneous Replacement of Both the Radial and Ulnar Heads: Dr J van der Westhuizen, Prof U Mennen.
~~15:40-15:45~~ Discussion
~~15:45-16:05~~ Distal Radio-Ulnar Joint Reconstruction: Prof B Adams
~~16:05-16:10~~ Discussion
~~16:15-17:15~~ Annual General Meeting
- 19:00 for SASSH Banquet: Simon van der Stel Room, The Castle, Cape Town
 19:30 (Dress: Smart Casual)

SUNDAY 31 AUGUST 2003

- ~~07:45-08:15~~ Registration
- SESSION 5 CHAIRMAN: DR M SOLOMONS**
~~08:15-08:55~~ Approach to and Concept of Treatment of Congenital Hand Differences: Prof S Hovius
~~08:55-09:05~~ Discussion
~~09:05-09:25~~ Arthrogryposis Multiplex Congenita Revisited: Prof U Mennen
~~09:25-09:35~~ Discussion
~~09:35-09:55~~ Classification and Pathogenesis of Congenital Hand Differences: Prof S Hovius
~~09:55-10:00~~ Discussion
- ~~10:00-10:30~~ TEA
- SESSION 6 CHAIRMAN: DR T LE ROUX**
~~10:30-11:30~~ Medical Ethics and the Practice of Surgery: Prof A van Niekerk
~~11:30-12:10~~ André Boonzaier Memorial Lecture: Dr J van Wingerden
 Presidential Handover
- ~~12:10-13:00~~ LUNCH
- SESSION 7 CHAIRMAN: DR M CARIDES**
~~13:00-13:10~~ Motor Recovery following Median and Ulnar Nerve Injuries: Prof S Hovius
~~13:10-13:20~~ The Cognitive Function following Nerve Injuries: Prof S Hovius
~~13:20-13:25~~ Discussion
~~13:25-13:45~~ The Value of Functional Tests in Forearm Nerve Injuries: Prof S Hovius
~~13:45-13:50~~ Discussion
~~13:50-14:10~~ New Implants for Rheumatoid Arthritis of the Hand and Wrist: Prof B Adams
~~14:10-14:15~~ Discussion
~~14:15-14:20~~ Closure by The President: Dr M Carides
- ~~14:20-14:50~~ TEA
- ~~14:50-16:50~~ Workshop: Cadaver Demonstration of Total Wrist, PIP and MCP Arthroplasty

NOTES

SUMMARIES OF PAPERS

A MULTI-CENTER, RANDOMIZED, DOUBLE BLIND, CLINICAL TRIAL OF TENOFIX™ – A TENDON FIXATION DEVICE FOR FLEXOR TENDON REPAIR

Drs M Solomons, A Barrow, T Senoge

We would like to report our results of a prospective randomized double blind study comparing standard tendon suturing to a new tendon fixation device for the definitive treatment of zone two flexor tendon lacerations. After randomization all patients were mobilised according to a modified Kleinert regime. Results were assessed using the Strickland scoring system.

Range of motion was similar in the two groups. The rupture rate in the standard suture group was 17% versus nil in the Tenofix group.

CLINICAL EXPERIENCE WITH A NEW TENDON FIXATION DEVICE USING AN ACCELERATED ACTIVE MOTION PROTOCOL

Drs M Solomons, S Carter, Ms A Catchpole, Drs M Rosenwasser, E Diao

We prospectively repaired 11 FDP tendons in 9 hands using a new tendon fixation device - the Tenofix. The device includes 2 intratendonous anchors joined by a 2/0-braided stainless steel suture and held with 2 stop beads. Only complete transections of both FDP and FDS tendons were included. Patients with joint injuries or fractures were excluded from the study. Follow up was for a minimum of 3 months. Clinical end points assessed included ROM of all joints of the affected digits and those of the contralateral digits for comparison. Furthermore the nail to table and pulp to distal palmar crease linear measurements were recorded. Patients were placed in a splint with the wrist and MP joints flexed 30°. Active flexion and extension was started immediately post operatively aiming for full flexion at 2 weeks post operatively according to an accelerated active motion protocol. All digits were assessed using the Strickland (TAM), Buck-Gramko and ASSH scoring systems. Two digits were graded as excellent, 5 good, 2 fair and 2 poor. We had no ruptures in our series. One device was removed at 4 weeks with no loss of function. This clinical study confirms that the Tenofix has sufficient tensile strength to resist the forces of a substantial active motion protocol.

FLEXOR TENDON INJURIES: WHAT IS A GOOD RESULT?

Drs P Rowe, M Solomons

We review the results of a set of patients with Zone II flexor tendon injuries. In this review we compared the various scoring methods commonly used to grade the outcome. We will discuss the merits and shortcomings of the scoring methods and show how the same digit can have both an excellent, good and fair result.

PIP JOINT CONTRACTURES – HAND THERAPY FOR SUCCESSFUL RESULTS

Ms L Pringle

The aim of the study was to determine factors influencing unsatisfactory results despite focused hand therapy. Once identified, patients were categorised and different approaches were implemented according to category.

An initial retrospective study was done and follow-up and assessment of most of 160 patients. Diagnosis/mechanism of injury included: Dupuytren's, trauma, crush injuries, phalanx fractures, Parkinsons, O.A.R.A., arthroplasty, dislocation, ligament injuries, scleroderma, burns, avulsion fractures, tendon injuries.

Factors included: Age, gender, occupation, sport, pain threshold, hobbies, body language, initial response to therapy plan, appearance, personality, compliance and attitude towards therapy and payment of accounts.

RESULTS

Implementing the different therapy protocols according to category proved to result in a significant improvement in outcome and final result.

INTRA-ARTERIAL SUBSTANCE INJECTION: A CASE REPORT	
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<i>Prof NGJ Maritz</i>	
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Gangrene following intra-arterial substance injection is well documented. Gammel was the first to describe a patient with skin necrosis, as a result of bismuth injections. Since then, many more were reported.

CASE REPORT

The patient, a well-known drug addict, tried to inject dissolved Valium tablets intravenous in his cubital fossa. We saw him a day later with a cold hand - the diagnosis of a substance block of the main arteries were made. An arteriogram confirms the occlusion. Eventually the patient ends up with an amputation through the MP-joints, as one would have predicted from the arteriogram.

CONCLUSION

In our times this may not be such a rare case. An arteriogram helps to determine the level of amputation and prevent repeat operations.

DUPUYTREN'S CONTRACTURE. A 5-YEAR PERSONAL AUDIT	
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<i>Dr E Bowen-Jones</i>	
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An audit of patients with Dupuytren's Contracture treated in private practice over 5 years was conducted. Twenty-seven were seen. Four were female. Mean age was 60.3 years. In the majority of cases both hands were affected but the right hand was worse affected more often than the left. Six patients had nodules on the foot and two had Peyronie's contracture. Eight had a family history, three were diabetics and one only an epileptic. In four cases the contracture followed injury.

A standardised operation raised Brunner flaps down the fingers and large, wide flaps on the palm so as to expose the whole affected area. The entire affected palmar fascia was excised where possible. Skin length was gained by multiple Y-V plasties. Mobilization commenced at 1 week. The few patients who did not mobilise well were sent to physiotherapy.

RESULTS

Results were good in 21 cases but disappointing in 6 with recurrent PIP joint contracture. Recurrences with the worst intensity were in patients whose contractures started in their 40's or younger. Early signs of scar thickening or recontracture were sometimes treated successfully with intralesional depot steroid injection. Patients do not come back for long term follow up and need to be contacted.

PERCUTANEOUS RELEASE OF TRIGGER FINGERS	
--	--

<i>Drs KG Adams, C Pienaar, M Solomons, S Carter, M Singer</i>	
--	--

Percutaneous release of trigger fingers has been intermittently reported in the literature since the 1940's but has not been widely accepted.

Recent reports in the literature have quoted good results with very few complications. We report on our experience with 20 cases presenting to the Martin Singer Hand Unit between February and May 2003. Most have had good outcomes with 2 complications and 1 patient requiring open operation.

HYPEROSTOTOIC MACRODACTYLY

Dr W Stuart

No abstract.

AN ONE-STAGE SHOULDER ARTHRODESIS AND BICEPS TENDON TRANSFER FOR UPPER BRACHIAL PLEXUS INJURIES

Drs M Cvitanich, M Solomons

AIMS OF STUDY

Upper brachial plexus injuries often result in loss of shoulder function (C5), poor sensibility to the thumb and index fingers (C6) and loss of elbow flexion (C6). Primary surgery is directed toward the plexus itself with the use of primary repair, nerve grafting or neurotization. Secondary reconstructive procedures are designed to address permanent loss of shoulder and elbow function. Most of the previously described procedures involve a shoulder arthrodesis followed by a second stage tendon transfer for elbow flexion. We have designed an one-stage procedure, which combines a glenohumeral arthrodesis with a Brooks and Seddon (1959) pectoralis major tendon transfer.

METHODS

Seven patients are described all with delayed presentations after injury to the left supraclavicular area. Clinically they had no demonstrable power in biceps, deltoid, supraspinatus, infraspinatus and brachioradialis. They also had sensory loss in the C5/C6 dermatomes. Due to the delay, the prognosis for nerve surgery was expected to be poor and therefore secondary reconstruction was indicated. An one-stage shoulder arthrodesis and longhead of biceps to pectoralis major tendon transfer was performed as described by Brooks and Seddon.

RESULTS

At three months post surgery, the patients had a range of motion of the left elbow on average from 20 - 140 flexion. The average power of elbow flexion was 4/5 and all were able to lift a 1.5 kg weight to their mouth. Of note was that brachioradialis was still 0/5 power and that clinically they had no Steindler effect. An EMG performed on the underlying biceps revealed no activity to account for their elbow flexion i.e. no neural recovery of biceps motor supply.

CONCLUSION

The commonly used two stage shoulder arthrodesis and motored tendon transfer for biceps involves two lengthy procedures, both with long rehabilitation periods. We feel that one stage glenohumeral arthrodesis and biceps tendon transfer is a useful procedure, saving the patient, the surgeon and the medical facility, time and money. Due to the nature of the exposure for glenohumeral arthrodesis, the easiest transfer to consider is the Brooks and Seddon procedure.

THE DIABETIC HAND

Prof NGJ Maritz

The influence of diabetes on hand function is not well known, although Rosenbloom described the diabetic hand syndrome as long ago as 1974. A recent entity is the so-called tropical diabetic hand syndrome - TDHS. The major risk factors for TDHS are unknown, but recent data suggest poor glycaemic control is associated with poor outcome. In this paper we want to discuss 4 cases to illustrate the problem.

CASE I: E.K.

The patient ends up with a ray amputation, but excellent result. In this case the co-operation and control of the diabetes was excellent.

CASE II: M.T.

This patient was a well-known diabetic with triggering of both thumbs. A release was done on both thumbs. The patient came back with a very septic hand. His diabetes was completely out of control, because he could not inject himself, with both hands being operated on. He ends up with major skin loss over the dorsum of his hands, with skin grafts - reasonable result.

CASE III: A.P.

This patient sustained a soft tissue injury to his hand, with skin loss. Several attempts to cover this, failed and eventually diabetes was diagnosed.

CASE IV: E.N.

Patient with poor control of her diabetes, with severe sepsis of the hand, and ends up with loss of 3 fingers, and most of her hand function.

CONCLUSION

With good diabetic control and repeated debridement, the patient may end up with a reasonable result.

EFFICACY OF THE POST-OPERATIVE PAIN PUMP IN HAND SURGERY

Dr W Stuart

No abstract.

MYCOBACTERIUM TUBERCULOSIS INFECTION OF THE WRIST

Drs M Cvitanich, M Solomons

Reports of tuberculosis infection of the wrist in the literature have been scarce especially over the last thirty years.

AIMS OF STUDY

To examine the clinical features, treatment options and outcomes of patients with tuberculosis of the wrist presenting to our Hand Unit.

METHODS

Nineteen cases of tuberculosis of the wrist over an 11-year period are presented. The average time to diagnosis was 5 months (range 1-24 months). Swelling and pain on motion were common symptoms. A restriction in wrist motion with an increased sedimentation rate was universal.

In 8 cases the disease involved the carpal bones. Ten had disease limited to the tenosynovium. One patient had purely a cold abscess not involving tendon sheath or bone. Granulomatous inflammation on paraffin section was seen in most patients; only 11 patients had a positive tissue culture of Mycobacterium Tuberculosis. Treatment of these patients can be divided into medical and surgical treatment groups. An incisional biopsy and antituberculous chemotherapy for a minimum of 6 months were carried out and administered in the medical-treated group. A surgical synovectomy for those with tenosynovitis as well as debridement and administration of antituberculous drugs were carried out on the surgical-treated group. All patients had a brief period of splintage followed by intensive physiotherapy. No patient had bony debridement or early arthrodesis to control the infection.

RESULTS

At an average follow-up of 12 months (range 6-24 months) all patients showed improvement in symptoms with an increased range of motion. Fifty percent of the patients showed some residual loss of wrist motion at final follow up. Patients who presented with dorsal tenosynovitis with limited flexion secondary to pain originating in the extensor compartment did poorly as a group and most never regained full flexion. The results showed no recurrence of infection in this study.

CONCLUSION

The diagnosis of tuberculous wrist infection may be difficult and requires a high index of suspicion. Although prompt diagnosis and treatment are crucial to prevent poor outcomes a delay in diagnosis is commonly seen.

THE SIMULTANEOUS REPLACEMENT OF BOTH THE RADIAL AND ULNA HEADS: A CASE STUDY

Dr J van der Westhuizen, Prof U Mennen

In the acute phase of a patient presenting with an Essex-Lopresti lesion - radial head fracture, interosseus membrane rupture with DRUJ instability, it is now accepted practice to repair the radial head, or replace the radial head if repair is impossible. Furthermore, immobilization of the forearm is also employed to facilitate the healing process of the interosseus membrane.

In the patient with chronic instability, who presents with DRUJ pain, the treatment is controversial and the results thereof unpredictable.

Treatment options vary from radial head replacement, ulna shortening, interosseus membrane repair and TFCC repair to the construction of a single bone forearm.

We present a 58-year-old male who after a motor vehicle accident presented with a loss of the radial head and 4 cm loss of the distal ulna. The unstable ulna caused much pain.

It was decided to address the unstable ulna with custom-made ulna head prosthesis. To prevent further migration of the radius it was decided to replace the radial head simultaneously.

A custom prosthesis was manufactured; utilizing a PEEK stem, PEEK spacer/locking nut and titanium head with a Ti-N surface treatment. A standard radial head implant with a PEEK stem and titanium head with a Ti-N surface treatment was used.

To replace the radial head at the same time will probably prove to be controversial. As far as we can establish this has never been performed on a previous occasion.

The choice of prosthesis depends on cost and availability. Custom made prosthesis have a higher complication rate and care must be taken with both the manufacturing and insertion of the prosthesis.

ARTHROGRYPOSIS MULTIPLEX CONGENITA REVISITED

Prof U Mennen

Since much confusion exists regarding Arthrogryposis Multiplex Congenita, the President of the IFSSH commissioned the AMC Committee to compile a report on the various aspects of this condition.

This report will be discussed highlighting all the facets of AMC, including definition, terminology, dermatographics, etiology, classification, clinical features, management, prognosis and further studies.

In summary, manipulation of the deformities starting soon after birth improves the range of motion, which if surgery needs to be done, makes the operation less extensive. Sometimes surgery may not even be necessary.

Early one stage corrective surgery between 3-12 months of age is encouraged which results in improved function and near normal cosmetic appearance. Late, piece-meal surgery results in disappointing outcome.

MEDICAL ETHICS AND THE PRACTICE OF SURGERY

Prof AA van Niekerk

This lecture deals with current-day ethical challenges to the practice of surgery.

The author starts by comparing the Hippocratic tradition of paternalistic medicine to the current-day situation in which the emphasis on respect for autonomy and justice have superseded the Hippocratic exclusive emphasis on beneficence and non-maleficence as the basic principles of medical ethics. He identifies five developments that have directly influenced and facilitated this phenomenon. These are the move from an emphasis on virtuous medical practitioners to contractual medicine, developments in medical science and technology, the resources crisis, medical malpractice and the rise of the culture of human rights. Hereafter he identifies six challenges to surgical practice, viz. the importance of trust between surgeon and patient, the issue of morally justified surgical procedures, the ethical training of surgeons, patient advocacy, particularly in view of managed care, unwarranted biases in surgical practice, and the importance of patient centred outcomes research. The author concludes by showing the relevance of an ethics of responsibility for surgical practice.

ADDRESS LIST OF SPEAKERS ADRESLYS VAN SPREKERS

Adams, Prof BD	University of Iowa Department of Orthopedics 200 Hawkins Dr. Iowa City, IA 52242	Tel (319) 3536222
Adams, Dr KG	10 Elgin Road Sybrand Park Cape Town 7700	Tel 021-4049111 Fax 021-6963093 Cell 083 234 1449 kevinadams@xsinet.co.za
Bowen-Jones, Dr EJ	St. Augustine's Medical Centre, Suite 105 391 Clark Road Durban 4001	Tel 031-2016240 Fax 031-2016527 Cell 083 250 7190 ebjones@mweb.co.za
Carides, Dr EM	PO Box 1729 Parklands Johannesburg 2121	Tel 011-4474481 Fax 011-4474488 Cell 082 411 4946 mcarides@netcare.co.za
Cvitanich, Dr MA	43 Alpina Road Claremont Cape Town 7708	Tel 021-4045107 Fax 021-6719388 Cell 084 510 2175 cathmark@absamail.co.za
Hovius, Prof Dr SER	Erasmus MC Dept. of Plastic Surgery Room H 764 Postbus 2040 3000 CA Rotterdam The Netherlands	Tel +31-10-463 3407 Fax +31-10-463 3731 hovius@plch.azr.nl
Maritz, Prof NGJ	Pretoria Academic Hospital Private Bag X169 Pretoria 0001	Tel 012-3546528 Fax 012-3546164 dswart@postillion.up.ac.za
Mennen, Prof U	374 Lawley Street Waterkloof Pretoria 0181	Cell 082 554 6408 Fax 012-3466968 umennen@icon.co.za
Pringle, Ms L	1 Kirsten Crescent Kirstenhof Cape Town 7945	Tel 021-9304970 Fax 021-7015651 Cell 082 784 5979 lpringle@iafrica.com
Rowe, Dr P	12 Ralieg Road Mowbray Cape Town 7700	Tel 021-4045107 Cell 083 264 9188 debbieandpaul@absamail.co.za

Solomons, Dr MW	Suite 128, Vincent Pallotti Hospital Pinelands Cape Town 7405	Cell 082 784 3025 Fax 021-5313621 docsol@absamail.co.za
Stuart, Dr WB	PO Box 412198 Craighall Johannesburg 2024	Tel 011-7875376 Fax 011-7875376 Cell 083 628 4513 carwalt@worldonline.co.za
Van der Westhuizen, Dr MJ	PO Box 73061 Lynnwood Ridge Pretoria 0040	Tel 012-3445768 Fax 012-3445745 Cell 082 574 2304 mjvdwest@xsinet.co.za
Van Niekerk, Prof AA	Director: Centre for Applied Ethics Department of Philosophy University of Stellenbosch Private Bag X1 Matieland 7602	Tel 021-8082055 Fax 021-8083556 Cell 082 411 7869 aavn@sun.ac.za
Van Wingerden, Dr JJ	PO Box 11122 Queenswood Pretoria 0121	Tel 012-3438333 Fax 012-3438666 Cell 082 782 5763 vanwingerden@webmail.co.za

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