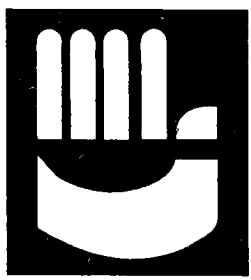
Die Suid-Afrikaanse vereniging vir Handchirurgie

The South African Society for Surgery of the Hand

KONGRES
CONGRESS
27



AUG. 31-1 SEPT.

1·9·9·6

CONTENTS
INHOUDSOPGAWE

MESSAGE OF WELCOME

PROF ULRICH MENNEN
PRESIDENT
THE SOUTH AFRICAN SOCIETY FOR SURGERY OF THE HAND

It's Congress time again!!

It's the time of year when we greet, meet, present, learn, debate and contribute. It's the time when we welcome an overseas distinguished lecturer to add new and different perspectives to our understanding of the Hand. It's the time for all those interested in the Hand to feel sufficiently enthusiastic to join in and get updated and recharged for another year of exciting hand surgery.

Welcome, therefore, to our 27th SASSH Congress and Instructional Course in Johannesburg. The programme over two days is packed with much handy information.

Enjoy!!

MESSAGE FROM

MR JOHN FLEMING CONGRESS ORGANISER

Welcome to Johannesburg - the place where things seem to happen bigger, better, faster etc. etc.

I hope you enjoy this year's congress, both from the academic and social aspects.

GUEST SPEAKER
GASSPREKER

Simon PJ Kay
Leeds, United Kingdom

PAST PRESIDENTS/VORIGE PRESIDENTE

1969 - 1971	*I. Kaplan*
1971 - 1973	*A.C. Boonzaier*
1973 - 1975	*M. Singer*
1975 - 1977	*J.H. Youngleson*
1977 - 1979	*T.L. Sarkin*
1979 - 1981	*C.E. Bloch*
1981 - 1983	*S.L. Biddulph*
1983 - 1985	*W.M.M. Morris*
1985 - 1987	*L.K. Pretorius*
1987 - 1989	*K.S. Naidoo*
1989 - 1991	*S.L. Biddulph*
1991 - April 1992	*B.J. Van R Zeeman*
April 1992 - 1993	*S.L. Biddulph*
1993 - 1995	*J.H. Fleming*

OFFICE BEARERS/AMPSDRAERS

President	*U. Mennen*
Honorary Secretary/Treasurer ***Ere-sekretaris/Tesourier***	*L.T. de Jager*
Members/Lede	*J.H. Fleming* *T.L.B. le Roux* *K.S. Naidoo* *J.J. v Wingerden*
Executive Secretary/ ***Uitvoerende Sekretaresse***	*Hendrika van der Merwe*
CONGRESS ORGANISERS ***KONGRESORGANISEERDERS*** ***1996***	*Mr J.H. Fleming* *Hendrika van der Merwe*

ANNUAL GENERAL MEETING
ALGEMENE JAARVERGADERING

SATURDAY 31 AUGUST 1996
16:30 - 17:15

(Members only/Lede alleenlik)

Venue/Plek
Auditorium
Johannesburg Hospital, Parktown, Johannesburg

1
Welcome address by the President
Verwelkoming deur die President

2
Apologies & Proxies
Verskonings & 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 President-Elect
Aankondiging van Pasverkose President

9
Membership/Lidmaatskap

10
SASSH Constitution: Proposed amendments
SAVH Grondwet: Voorgestelde wysigings

11
General/Algemeen

12
Next Annual General Meeting
Volgende Algemene Jaarvergadering

SOCIAL EVENT
SOSIALE BYEENKOMS

31 AUGUST 1996

18:30

BANQUET/BANKET

(delegates and partners/
kongresgangers en metgeselle)

JOHANNESBURG COUNTRY CLUB, AUCKLAND PARK

Admission to this function by invitation only

NEXT REFRESHER COURSE
VOLGENDE OPKNAPPINGSKURSUS

3-4 March 1997
CAPE TOWN

NEXT CONGRESS
VOLGENDE KONGRES

30 - 31 August 1997
CAPE TOWN

GENERAL INFORMATION
ALGEMENE INLIGTING

Congress venue	*Auditorium* *Johannesburg Hospital* *York Road* *Parktown* *JOHANNESBURG*
Cell Phones	*All cell phones should be turned off during conference sessions*
Information Desk	*Please feel free to visit the Information Desk should you require any assistance*
Smoking	*No smoking will be permitted during the conference*
Teas and Lunches	*Will be served in the trade exhibition area*
Parking	*Ample parking at the venue*

Please wear your name tag at all times

- Welcome
- Thank Congr Organ
- Flowers
- Exco members - Reg Prize
- Bouquet   Mur Tea time
-

SCIENTIFIC PROGRAMME

CONGRESS
31 AUGUST 1996

07:30 - 08:00	Registration/Registrasie	
08:00 - 08:15	Welcome and announcements Verwelkoming en aankondigings	*Prof U Mennen*

SESSION ONE

CHAIRMAN/VOORSITTER: Prof K.S. Naidoo

08:15 - 08:35	Congenital Hand Surgery - General Topics and Decision Making *Mr. Simon Kay, Leeds, U.K.*
08:35 - 08:45	Discussion/Bespreking
08:45 - 08:55	Upper Limb Triplication including Radial Dimelia - A case report *Prof. U. Mennen, Medunsa*
08:55 - 09:00	Discussion/Bespreking
09:00 - 09:10	Dynamic Uncontrolled Splintage after Extensor Tendon Repair - A prospective study *Drs. C.E. Tuson, E. Mudau, Johannesburg*
09:10 - 09:15	Discussion/Bespreking
09:15 - 09:25	Flexor Tendon Repair followed by immediate control mobilization *Dr. M.E. Senoge, Durban*
09:25 - 09:30	Discussion/Bespreking
09:30 - 09:40	The Results of Two-stage Flexor Tendon Reconstruction *Drs. M. Dixon*; L.T. de Jager, Cape Town*
09:40 - 09:45	Discussion/Bespreking
09:45 - 09:55	Multistrand Flexor Repair for Early Active Mobilization *Dr. G. Psaras*, Johannesburg*
09:55 - 10:00	Discussion/Bespreking
10:00 - 10:30	TEA/TEE

SESSION TWO

CHAIRMAN/VOORSITTER: Dr T le Roux

10:30 - 10:40 Surgical Treatment of Clavicular Non-Union
Drs. J.F. de Beer, K. van Rooyen, Cape Town

10:40 - 10:45 Discussion/Bespreking

10:45 - 10:55 The Results of Median Nerve Repair in Adults
Drs. H.M. Kaplan, M. Soldin, D.A. Hudson, M. Singer, Cape Town*

10:55 - 11:00 Discussion/Bespreking

11:00 - 11:10 Functional Results of the D'Abreu Pinch Transfer
Drs. D.G. Bolitho, L.T. de Jager and Lara Strong, Cape Town*

11:10 - 11:15 Discussion/Bespreking

11:15 - 11:25 Interscalene Nerve Block and Phrenic Nerve Function *Drs. A. Boezaart, J.F. de Beer, K. van Rooyen, C. du Toit, Cape Town*

11:25 - 11:30 Discussion/Bespreking

11:30 - 11:40 Lunate-Perilunate Dislocations - A Misnomer
Prof. K.S. Naidoo, Durban

11:40 - 11:45 Discussion/Bespreking

11:45 - 11:55 The Homodigital Island Pedicle Flap
Dr. L.T. de Jager, Cape Town

11:55 - 12:00 Discussion/Bespreking

12:00 - 12:10 Arthroscopic Capsulotomy aided by Continuous Interscalene Brachial Plexus Block for Management of "Frozen Shoulder"
Dr. J.F. de Beer, A. Boezaart, K. van Rooyen, Cape Town

12:10 - 12:15 Discussion/Bespreking

12:15 - 12:25 Septic Arthritis and Osteitis of Digits
Drs. C.E. Tuson, K. Solwendle, Johannesburg

12:25 - 12:30 Discussion/Bespreking

12:30 - 13:30 LUNCH/MIDDAGETE

SESSION THREE

CHAIRMAN/VOORSITTER: Dr L.T. de Jager

13:30-13:40	Radiographic Criteria for Predicting Ulnar Translocation of the Rheumatoid Wrist following Ulnar Head Excision *Drs. D.G. Bolitho*, R. Jaffe, Cape Town*
13:40 - 13:45	Discussion/Bespreking
13:45 - 13:55	The Dorsal Ganglion - A Clinical sign of an Occult Ailment? *Prof. U. Mennen, Medunsa*
13:55 - 14:00	Discussion/Bespreking
14:00 - 14:10	The Modified Weaver-Dunn Procedure for Acromioclavicular Joint Dislocation *Drs. J.F. de Beer, K. van Rooyen, Cape Town*
14:10 - 14:15	Discussion/Bespreking
14:15 - 14:25	The Effect of Swan-neck- and Boutonniere Deformities on the Function of the Hand *Ms. C. van Velze, Z. Knacke, Imme. I. Shipham, H. van der Merwe, Pretoria*
14:25 - 14:30	Discussion/Bespreking
14:30 - 14:40	Sarcoidosis of the Hand - A Case Report *Prof K.S. Naidoo, Durban*
14:40 - 14:45	Discussion/Bespreking
14:45 - 14:55	Thumb Replantation Salvage using the First Dorsal Metacarpal Flap - A Report of Two Cases *Dr. J.R. Lindsay, Johannesburg*
14:55 - 15:00	Discussion/Bespreking
15:00 - 15:30	TEA/TEE

SESSION FOUR

CHAIRMAN/VOORSITTER: Dr J H Fleming

15:30 - 15:40	Botulinum Chemodenervation - A New Modality of Treatment in the Treatment of the Spastic Forearm *Drs G. de Aguiar, L. Chait, W. Smit, Johannesburg*
15:40 - 15:45	Discussion/Bespreking
15:45 - 16:05	Microvascular Surgery in Children *Mr Simon Kay, Leeds, U.K.*
16:05 - 16:15	Discussion/Bespreking
16:15 - 16:20	Closure by President/Afsluiting deur President
16:30 - 17:15	Annual General Meeting (members only) Algemene Jaarvergadering (slegs lede) Venue/Plek: Auditorium, Johannesburg Hospital
18:30	Banquet/Banket Johannesburg Country Club, Auckland Park

* Papers for consideration for Smith & Nephew Literary Award

Pain / Fear / Temp / Volume

INSTRUCTIONAL COURSE/OPKNAPPINGSKURSUS
1 SEPTEMBER 1996

Presented by / Aangebied deur

MR. SIMON KAY

08:00 - 08:30 Registration / Registrasie

CHAIRMAN/VOORSITTER: Dr. S.L. Biddulph

08:30 - 09:00 Assessment of Trauma in the Hand
09:00 - 09:15 Discussion / Bespreking
09:15 - 09:45 Skin Cover in the Upper Limb
09:45 - 10:00 Discussion / Bespreking
10:00 - 10:30 TEA / TEE

CHAIRMAN/VOORSITTER: Dr. J. van Wingerden

10:30 - 11.00 Microsurgery of the Upper Limb
11:00 - 11:15 Discussion / Bespreking
11:15 - 11:45 Obstetrical Brachial Plexus Surgery
11:45 - 12:00 Discussion / Bespreking
12:00 - 12:30 The Management of Cleft Hand
12:30 - 12:45 Discussion / Bespreking
12:45 - 14:00 LUNCH / MIDDAGETE

CHAIRMAN/VOORSITTER: Prof. U. Mennen

14:00 - 14:30 Pollicization
14:30 - 14:45 Discussion / Bespreking
14:45 - 15:15 Median Nerve Palsy
15:15 - 15:30 Discussion / Bespreking
15:30 - 16:00 Finger Tip Injuries
16:00 - 16:15 Discussion / Bespreking
Closure by the President

SUMMARIES OF PAPERS
OPSOMMINGS VAN VOORDRAGTE

1. *MR SIMON KAY: CONGENITAL HAND SURGERY: GENERAL TOPICS AND DECISION MAKING*

Congenital differences of the hand and upper limb present problems in management that extend beyond an attempt at correction of the structural abnormality. Decisions must be made about the optimal management of the family, consequences of the abnormality and about whether treatment is indicated and when. Treatment should be considered not just for the anomaly but for its consequences and preventative measure for future pregnancies should also be considered.

Treatment may be by conservative means or by combination of conservative and surgical means and should be based on the sound principles of diagnosis and prognosis. The considerations of the parents are significant but not paramount and surgical principles should be focused on preventing progression of an abnormality, producing a competent limb for childhood as nearly socially acceptable to peer group as possible and yet offering the best future possibilities for independent earning and lifestyle as possible. Psychological support and advice for the family and the child form an important part of this process.

2 *PROF. U. MENNEN: UPPER LIMB TRIPLICATION INCLUDING RADIAL DIMELIA: A CASE REPORT*

This case report describes a very unusual case of upper limb triplication. The fused upper two limbs present as a duplicated mirror hand, joined along the ulnar side from the small finger up to the humerus. The third fully developed upper limb with its own brachial plexus was attached to the rib cage just inferior to the duplicated superior limb. This exceptional abnormality further corroborates the theory that the development of the more distal segments of the limb is determined by the more proximal segments.

3. ***DRS. C.E. TUSON, E. MUDAU: DYNAMIC UNCONTROLLED SPLINTAGE AFTER EXTENSOR TENDON REPAIR - A PROSPECTIVE STUDY***

AIMS: To compare initial static splintage with early uncontrolled dynamic splintage.

METHOD: We examined all extensor tendon injuries between MCPJ'S and muscle bellies (including complex injuries, but excluding cases with flexor tendon or motor nerve injuries).

Surgery and post operative treatment were standardised, and patients were randomly allocated to two groups, viz initial static splintage or dynamic uncontrolled splintage. They were examined at frequent set intervals by an orthopaedic surgeon not involved in initial surgery and by an occupational therapist.

RESULTS: There were 44 tendons in the static splintage group and 29 in the dynamized group, with an average follow-up of 29,6 weeks. There was little difference between the two groups in the total active ROM - but the power of grip was generally better in the group statically splinted. The dynamized group showed longer times to perform tasks on Jebsen Functional Testing and the extensor lag lingered longer in those in static splints. The time off work was longer in the dynamized group.

CONCLUSION: It is probably safer to initially statically splint repaired extensor tendons than to allow uncontrolled motion in a lively splint.

4. *DR. M.E. SENOGE: FLEXOR TENDON REPAIR FOLLOWED BY IMMEDIATE CONTROL MOBILISATION*

The purpose of this paper is to present a series of patients who underwent tendon graft for zone II flexor tendon injury followed by immediate control motion. The details of the surgical technique as well as the method of mobilisation will be illustrated.

5. *DRS. M. DIXON, L.T. DE JAGER: THE RESULTS OF TWO-STAGE FLEXOR TENDON RECONSTRUCTION*

Not available at time of printing.

6. *DR. G. PSARAS: MULTISTRAND FLEXOR REPAIR FOR EARLY ACTIVE MOBILISATION*

The objective of this study is to establish a flexor tendon repair technique that will allow early, safe mobilisation of the injured digit.

Part A =

The modified Kessler technique for flexor tendon repair was compared to a new Multistrand technique.

Biomechanical assessment was carried out with the use of cadaveric tendons. The following parameters were measured:

1. Tensile strength
2. Gap formation
3. Work of flexion

The methodology and results will be reported.

Part B =

Subsequently the Multistrand technique was applied in the clinical setting for the repair of lacerated flexor tendons. A programme of early mobilisation was introduced.

The results and complications will be presented.

7. *DRS. J.F. DE BEER, K. VAN ROOYEN: SURGICAL TREATMENT OF CLAVICULAR NON-UNION*

Non-union of clavicle fractures is rare but when they do occur, surgery is usually required due to pain.

Bone grafting is always indicated and various methods of internal fixation can be used.

The author has established guidelines for the most appropriate form of internal fixation for each type of non-union:

1. Haggie Pin with compression bolt for smaller diameter clavicles
2. Cannulated compression screw (6,5mm) for larger diameter clavicles
3. Plate and screws for clavicles with insufficient medullary canals
4. Side to side cerclage for clavicles with shortening and overlapping which prove to be irreducible
5. Intercalary bone grafting and plating for atrophic non-unions with bone loss

METHODS: Ten patients were treated and followed up retrospectively. The following types of non-union were encountered:

Spontaneous non-union after fracture:	3
Non-union after previous ORIF (referred from elsewhere)	5
Congenital pseudoarthrosis of the clavicle	1
Disruption of previous fibrous union	1

Patients were all followed to establish if they progressed to painless union.

RESULTS: All of these patients (100%) were satisfactorily treated - their fractures united and they gained painless, normal function.

CONCLUSION: Painful non-union of the clavicle was successfully treated by adhering to the abovementioned guidelines.

8. *DRS. H.M. KAPLAN, M. SOLDIN, D.A. HUDSON, M. SINGER: THE RESULTS OF MEDIAN NERVE REPAIR IN ADULTS*

Twenty five patients with median nerve injuries were assessed between 1 and 5 years post-repair. A quantitative evaluation and grading according to the MRC classification was used to assess sensory and motor recovery. Age and gender distribution, mechanism of injury and the results of primary, delayed primary and secondary nerve repair are presented. Patient age, level of injury, time to repair and severity of injury appear to affect prognosis.

9. *DRS: D.G. BOLITHO, L.T. DE JAGER, LARA STRONG: FUNCTIONAL RESULTS OF THE D'ABREU PINCH TRANSFER*

The likelihood of intrinsic motor recovery following ulnar nerve repair in the adult is poor (Trevett et al, J Hand Surg 1995: 20B; 444) The objective of this study is to determine the functional results of the D'Abreu pinch transfer in the intrinsic minus hand.

Twenty four patients with intrinsic paralysis following ulnar nerve palsy were included in the study. All patients had sustained traumatic ulnar nerve transection with repair and were symptomatic of weakness in the affected hand.

Patients were clinically assessed for surgery following a period of at least 3 months after ulnar nerve repair. Preoperative measurement of pinch strength and power grip was assessed using a vigorimeter. A complete functional assessment, including a Jebsen test was performed by an occupational therapist trained in hand therapy. Surgery involved use of the extensor indicis proprius tendon passed through the second web space and attached to the tendon of adductor, whilst EPB was rerouted to the first dorsal interosseous. All patients were immobilised for 4 weeks postoperatively, whereafter a programme of physiotherapy, muscle retraining and vocational rehabilitation was embarked upon. Measurements of pinch and power grip were made following a period of at least 12 weeks after surgery.

RESULTS: The mean patient age was 34 yrs, with the non-dominant hand being injured in 80%. The majority of injuries occurred at the wrist (44%), with the forearm and upper arm equal in incidence (27%). The mean delay between nerve repair and transfer was 13 months. The results of testing of pinch and power grip in the injured vs non-injured hand are given below:

Pinch grip	**injured**	**non-injured**	**percent**
Preoperative	4.2	10.2	41%
Postoperative	4.3	10.2	42%
Power grip	**injured**	**non-injured**	**percent**
Preoperative	11.7	34.7	34%
Postoperative	17.9	41	44%

The results of preoperative pinch and power grip strength showed a profound weakness on the affected side, as might be expected following ulnar nerve injury. Timed tasks as recorded

by the Jebsen test were slower on the affected side. Pinch grip strength was not significantly improved postoperatively, although power grip tended to be greater. Clinical assessment of the patients postoperatively, however, demonstrated a contracted first web space in most patients.

Despite the measurable improvement in power grip, and the improved function that was associated with this, we feel that the high incidence of first web space narrowing constituted a constant and significant complication of the procedure.

10. DRS. A. BOEZAART, J.F. DE BEER, K. VAN ROOYEN, C. DU TOIT: INTERSCALENE NERVE BLOCK AND PHRENIC NERVE FUNCTION

INTRODUCTION: Interscalene nerve block is commonly used in shoulder and upper limb surgery, both as an intraoperative method and for postoperative analgesia.

The purpose of this study was to evaluate diaphragmatic function following three techniques of interscalene nerve block (ISNB):

METHODS: Sixty consecutive adult patients presented for shoulder surgery were studied in 3 groups:

Group I: Standard ISNB (first 20 patients)

Group II: Nerve stimulator assisted ISNB (second 20 patients)

Group III: Nerve stimulator assisted ISNB with placement of catheter into brachial plexus sheath for continuous infusion (third 20 patients)

Diaphragmatic movements were measured sonographically postoperatively. Postoperative pain was measured on a visual analog scale (VAS) from 0-10.

RESULTS: Postoperative pain (VAS): Group I - 0.66; Group II - 0.00; Group III - 0.00

Complete phrenic nerve block: Group I - 85%; Group II - 35%; Group III - 20%

Recurrent laryngeal nerve paralysis: Group I - 20%; Group II - 5%; Group III - 0%

CONCLUSION: Nerve stimulator-assisted ISNB yielded excellent analgesia and a low incidence of complications. The high incidence of complete phrenic nerve blocks and other complications found with ISNB not assisted by a nerve stimulator should make the use of a nerve stimulator for ISNB advisable.

11. *PROF. K.S. NAIDOO: LUNATE-PERILUNATE DISLOCATIONS - A MISNOMER*

The purpose of this paper is to show that the terms lunate/perilunate-dislocations represent a midcarpal injury which may be simple or complex. This conclusion is based on a study of a series of patients with acute and chronic dislocations who underwent surgical treatment. This study reveals that in a dorsiflexion injury the initial dislocation occurs between the capitate and lunate - i.e. a simple dislocation. Continuation of the energy forces would cause injury to both the radial and ulnar aspects of the carpus and wrist resulting in a complex dislocation. Thus on the radial aspect, there may be a scapho-lunate dissociation or fracture of the scaphoid together with either a radial styloid fracture or rupture of the radial collateral ligament. On the ulnar side, the injury might involve the triquetrum, pisiform, ulnar styloid or distal radio-ulnar joint. Both the simple and complex dislocations should be called midcarpal dislocations.

Most midcarpal dislocations occurred in a dorsal direction. The important principle in treatment was to restore the normal relationship between scaphoid, lunate and capitate, the key being the scapholunate relationship. Simple dislocations could be treated by closed methods while the complex injuries usually requires surgery. In scapholunate dissociations it was necessary to transfix the scaphoid to the lunate and sometimes the capitate with 2 Kirschner wires to facilitate repair of the ligaments. Unstable scaphoid fractures required Kirschner wire or screw fixation. In 2 neglected cases who were labourers, a limited fusion between the scaphoid, lunate and capitate was found to be beneficial.

12. *DR. L.T. DE JAGER: THE HOMODIGITAL ISLAND FLAP*

Extensive volar skin loss of the distal phalanx when bone is exposed can be treated by a cross finger flap. Amputation would require much shortening of the digit. A recent alternative is the homodigital island flap, based on a digital artery. The purpose of this paper is to introduce the homodigital island flap.

The technique of the procedure will be illustrated. Compared to the cross finger flap it has the advantages of:

1. a one stage procedure
2. it does not interfere with movement and
3. surgery to a normal finger is not required

Careful microsurgical dissection is required, which increases the initial operating time.

Six cases were done. All had extensive volar skin loss of the distal phalanx with bone exposed and would normally have been considered for a cross finger flap. A skin graft to the donor area was required in 5 cases. All the flaps survived. Sensation was only protective. One patient required a dynamic PIP joint extension splint to overcome a developing PIP joint flexion contracture. Physiotherapy was used routinely.

The homodigital island flap is an alternative to the cross finger flap. It is not indicated when simpler options such as occlusive dressings, skin grafts or a V-Y plasty would give a good result.

13. *DRS. J.F. DE BEER, A. BOEZAART, K. VAN ROOYEN: ARTHROSCOPIC CAPSULOTOMY AIDED BY CONTINUOUS INTERSCALENE BRACHIAL PLEXUS BLOCK FOR MANAGEMENT OF "FROZEN SHOULDER"*

INTRODUCTION: "Frozen shoulder" is a condition characterized by an insidious and progressive loss of active and passive motion of the shoulder. This loss of motion is usually accompanied by a severe pain and often leads to significant deficits in ability to perform activities of daily living. Employment and sleep are often adversely affected. Traditional treatment modalities are generally unsatisfactory.

The purpose of this study was to evaluate the therapeutic value of arthroscopic capsulotomy combined with continuous interscalene brachial plexus nerve block (CISNB).

METHODS: Following standardised general anaesthesia and CISNB, arthroscopic capsulotomy was performed on 34 patients with adhesive capsulitis. Postoperatively bupivacaine was titrated via the CISNB to effect shoulder analgesia, but maintaining motor function in the forearm and hand, allowing the patient to perform pain-free active/passive exercises. Movement (0°) and pain (VAS) were measured preoperatively, 1 week and 6 weeks postoperatively.

RESULTS: The active elevation, gleno-humeral abduction, external and internal rotation all improved dramatically. Pain was dramatically reduced, often within days.

CONCLUSION: This management regime yielded excellent results.

14. *DRS. C.E. TUSON, K. SOLWENDLE: SEPTIC ARTHRITIS AND OSTEITIS OF DIGITS*

AIMS: To assess the efficacy of transarticular K wire stabilisation.

METHOD: All patients presenting with septic arthritis of digits between June 1994 and December 1995 were examined. After debridement and washout of joints, transarticular K wire immobilisation was instituted in either the position of immobilisation if the joint cartilage was preserved or the position of arthrodesis if it was compromised. Cloxacillin was given empirically until results of bacteriology were known.

RESULTS: Seventeen digits in 17 patients were examined. Causes of injury and job types were noted. The average stay in hospital was relatively short, K wires kept in-situ for up to one month. There were 3 amputations (1 for continuing sepsis, 1 for not coping with an arthrodesed finger) and 2 arthrodeses ab initio. All cases settled except 2 (who had missed K wire placement).

There were 5 stiff joints, 6 with FED and loss of 50% flexion and 6 not yet rehabilitated. The average time to return to work was 22 weeks and the delay in definitive treatment was 3 weeks, one person changed his job and 2 were retrenched. Bacteriology was available in 10 cases.

CONCLUSION: Septic arthritis and osteitic of digits is a devastating condition, its diagnosis is often missed and treatment is delayed. Debridement and transarticular K wires are suggested even in advanced sepsis.

Sophisticated antibiotics were never prescribed and mechanical measures play a greater role than chemotherapy.

15. *DRS. D.G. BOLITHO, R. JAFFE: RADIOGRAPHIC CRITERIA FOR PREDICTING ULNAR TRANSLOCATION OF THE RHEUMATOID WRIST FOLLOWING ULNAR HEAD EXCISION*

Ulnar translocation of the wrist is an undesirable complication following ulnar head excision in rheumatoid wrist surgery. Preoperative radiologic criteria for the predication of significant ulnar wrist translocation would prove useful in the decision between ulnar head excision alone or limited/full wrist arthrodesis.

The pre- and postoperative radiographs of 30 rheumatoid patients submitted for ulnar head excision were reviewed. The presence of extensor tendon ruptures was noted. The following criteria were examined as possible predictive criteria:

extent of ulnar resection;
slope of the distal radial articular surface;
position of the lunate relative to the radial articular surface;
radiocarpal arthritis;
midcarpal arthritis;
radius-second metacarpal angle

Radiologic criteria for the addition of a limited carpal fusion or ulna stabilisation procedure are given. In patients at rist for ulnar translocation, it is recommended that consideration be given to the addition of a Chamay radiolunate fusion or Kapanje procedure.

16. *PROF. U. MENNEN: THE DORSAL GANGLION - A CLINICAL SIGN OF AN OCCULT AILMENT?*

Question 1: What is the dorsal ganglion of the wrist?
Question 2: Why are they more frequent in young females?
Question 3: What is the aetiology?
Question 4: Why are they painful at times?
Question 5: What is the correct management?

Answers:

The dorsal ganglion is probably an accumulation of concentrated synovial fluid contained in a sack lined by flattened cells. The patho-physiology is still uncertain.

This sack results from degeneration/metaplasia of a constant localised area in the capsule over the scapho-lunate joint. This cystic degeneration may be the result or cause of erosive synovitis on the dorsum of the carpal bones, in particular capitate, trequetrum and scaphoid. The pain results from pressure and irritation to the posterior interosseous nerve. Management should address the swelling (i.e. ganglior), the degenerated capsule, the erosion, the synovitis and the posterior interosseuus nerve.

17. *DRS. J.F. DE BEER, K. VAN ROOYEN: THE MODIFIED WEAVER-DUNN PROCEDURE FOR ACROMIOCLAVICULAR JOINT DISLOCATION*

Coracoid based coraco-acromial ligament (CAL) transfer to the distal clavicle has proved to be a very successful procedure in our hands. The majority of cases were done for chronic, symptomatic AC joint separation. Acute grade III AC dislocations are usually treated conservatively by the authors except in sportsmen or labourers engaging in frequent overhead activities.

METHOD: Fourteen patients were followed retrospectively. Follow-up was 4-18 months. Cases were divided into:

Chronic AC joint instability:	10 cases
Acute grade III AC dislocation	3 cases
Revision for previously done AC reconstruction	1 case

SURGICAL PROCEDURE: A superior sagittal incision (4cm) is made: The CAL is released with a small block of bone from the acromion. The lateral few mm's from the clavicle are removed and the clavicular medullary canal prepared - the end of the CAL (with the bone) is transferred into the canal. The reconstruction is protected by PDS cord passed through the clavicle and subcutaneously around the coracoid.

RESULTS: All cases, except one resulted in painfree stable AC joints with excellent function.

CONCLUSION: This procedure was most satisfactory in treating ACJ instability.

18. *MSS. I. SHIPHAM, C. VAN VELZE, Z. KNACKE, H. VAN DER MERWE: THE EFFECT OF SWAN-NECK AND BOUTONNIERE DEFORMITIES ON THE FUNCTION OF THE HAND*

AIM: To compare the effect of swan-neck and boutonniere deformities on the functional use of the hand.

METHOD: Patients with swan-neck and boutonniere deformities of one or more fingers will be recruited. They will be classified according to the type and severity of deformity of their dominant hand.

Each patient will be tested with 2 functional tests:

1. an activity focussing on the use of the radial fingers
2. an activity focussing on the use of the ulnar fingers

The strength of each patient's palmar grip will also be measured.

Analysis: Results will be analysed to establish correlation between the category of deformity, the scores on the functional tests and power grip.

19. *PROF. K.S. NAIDOO: SARCOIDOSIS OF THE HAND - A CASE REPORT*

Sarcoidosis is an unusual cause of a swelling of the hand. This paper will discuss a patient who presented with painless granulomas of the fingers and thumb of both hands. The clinical and radiological features will be illustrated together with a discussion of the management and a brief literature review

20. *DR. J.R. LINDSAY: THUMB REPLANTATION SALVAGE USING THE FIRST DORSAL METACARPAL FLAP - A REPORT OF TWO CASES*

The dorsal metacarpal kite flaps provide a safe and reliable method of skin cover, also providing sensation where needed. The evolution, indications and techniques of the metacarpal flaps are described with an illustrative report of 2 cases used to salvage thumb replantation.

21. *DRS. G. DE AGUIAR, L. CHAIT, W. SMIT: BOTULINUM CHEMODENERVATION: A NEW MODALITY OF TREATMENT IN THE TREATMENT OF THE SPASTIC FOREARM*

INTRODUCTION: The benefits of Botulinum A toxin ("Botox") injection to relieve the typical thumb-in-palm deformity in the cerebral palsied hand has been previously described by this group. The use of this modality of treatment was expanded to include the flexion deformity of the wrist and pronation of the forearm.

MATERIALS AND METHODS: Fifteen cerebral palsied patients between the ages of 2 and 16 were studied prospectively over a 1 year period. Eleven patients had hemiparetic and 3 quadriparetic cerebral palsy.

A pre- and post-injection assessment was performed by a panel consisting of plastic surgeons and occupational therapists trained in the treatment of cerebral palsied patients. Assessment included active and passive range of movements, goniometry, graded activities of daily living, video and photographic analysis. Assessments were conducted at 3 month intervals post-injection. Those patients having spastic forearm flexor muscles received between 50-75u of "Botox" into the flexor muscle group using EMG guidance. For pronation deformities, 30-50u were injected directly into the pronator muscle, again under EMG guidance.

RESULTS: All patients showed improvement in hand status following the injection, without complications. The degree and duration of improvement varied, and further details will be presented.

CONCLUSION: We have successfully used Botulinum chemodenervation as a safe and simple modality of treatment for all the composite deformities associated with the cerebral palsied upper limb - i.e. the thumb-in-palm, wrist flexion and forearm pronation postures. This modality may be repeated as often as required and has been found to be an effective alternative to traditional surgical techniques.

22. *MR. SIMON KAY: MICROVASCULAR SURGERY IN CHILDREN*

From the earliest days of successful microvascular transplantation children have benefited. Nonetheless many find the prospect of microvascular surgery in children daunting for a variety of reasons which include the fragile nature of children, the need for specialist critical care, the small size of the constituent parts, difficulties in rehabilitation and not least the complexity of the issues of consent and assent. All of these areas are discussed with illustrations from free microvascular replantation, digit transfer, joint transfer, bone transfer and skin transfer. It is concluded that in addition to the many benefits of microvascular surgery in adults can be added some specific benefits of that surgery in children.

ADDRESS LIST OF SPEAKERS
ADRESLYS VAN SPREKERS

BOLITHO, D.G.

Dept of Plastric & Reconstructive Surgery
Groote Schuur Hospital
Observatory
7925 CAPE TOWN
Tel (021) 404 5306
Fax (021) 434 2662

DE AGUIAR, G.

Suite F
Milpark Hospital
PARKTOWN
2193
Tel (011) 482 2482
Fax (011) 482 8177

DE BEER, J.F.

Suite 1
Leeuwendal Medi-Clinic
Derwent Road
Tamboerskloof
8001 CAPE TOWN
Tel (021) 23 4040
Fax (021) 26 2095

DE JAGER, L.T.

15 Broadwalk
PINELANDS
7405
Tel (021) 531 3621
Fax (021) 531 3621

DIXON, M.

Dept of Orthopaedic Surgery
Groote Schuur Hospital
Observatory
7925 CAPE TOWN
Tel (021) 404 5108
Fax (021) 472 709

KAPLAN, H.M.

Dept of Plastic & Reconstructive Surgery
Groote Schuur Hospital
Observatory
7925 CAPE TOWN
Tel (021) 439 4397
Fax (021) 439 4397

KAY, SIMON

Dept of Plastic & Reconstructive Surgery
St. James's University Hospital
Leeds LS9 7TF
UNITED KINGDOM
Tel (0944) 113 2433144 x 5265
Fax (0944) 113 2426496

LINDSAY, J.R.	*PO Box 85384* *Emmarentia* *2029 JOHANNESBURG* *Tel (011) 788 1990* *Fax (011) 486 3145*
MENNEN, U. (PROF.)	*Dept Hand- and Microsurgery* *PO Box 186* *0204 MEDUNSA* *Tel (012) 529 4219* *Fax (012) 529 4219*
NAIDOO, K.S.(PROF)	*Dept of Orthopaedic Surgery* *Medical School* *University of Natal* *P.O. Box 17039* *CONGELLA* *4013* *Tel (031) 260 4374* *Fax (031) 260 4518*
PSARAS, G.	*Dept of Plastic & Reconstructive Surgery* *Ward 494: Johannesburg Hospital* *York Road* *Parktown* *2194 JOHANNESBURG* *Tel (011) 488 3494* *Fax (011) 488 4163*
SENOGE, M.E.	*Dept of Orthopaedic Surgery* *Medical School* *University of Natal* *P.O. Box 17039* *CONGELLA* *4013* *Tel (031) 260 4374* *Fax (031) 260 4518*
SHIPHAM, I.	*4 Manor Terrace* *Lynnburn Road* *LYNNWOOD MANOR* *0081* *Tel (012) 354 6040* *Fax (012) 354 6006*
TUSON, C.E.	*P.O. Box 8001* *WESTERN LEVELS* *2501* *Tel (0149) 7002700* *Fax (0149) 7003447*

TRADE EXHIBITORS
HANDELSUITSTALLERS

MACROMED cc

SMITH + NEPHEW Limited

STRATMED

SURGITECH

SYNTHES SOUTH AFRICA (Pty) Ltd

ACKNOWLEDGEMENTS
ERKENNINGS

We are grateful to the following companies for their generous sponsorships:

MACROMED cc	*Donation*
SMITH & NEPHEW LTD	*Literary Prize* *Name tags* *Stationery*
STRATMED	*Donation*

Mr Simon Kay is co-guest of the MRC and SASSH

= Slide – baba + volar hand

= Cortical representation in body image
– will use if useful.

NOTES/NOTAS

= REACH → atlas / lys van. paresthe.

= Kurt → Pi-Pooyen

* Brief aan Swanson

* Brief aan Dennis Birkit

* Brief Antoine.

– Clark Criteria for Brach. Plex eval

= Neurolysis of OBP not indicated

= ∅ indications OBP → no delt or biceps recovery at 3½