V INTERNATIONAL CONGRESS

SCIENTIFIC PROGRAM

INTERNATIONAL SOCIETY OF CRANIOFACIAL SURGERY

OAXACA, MEXICO, OCTOBER 24-26, 1993
SUNDAY, OCTOBER 24, 1993.

08:00 a.m. WELCOME AND INAUGURATION.
Dr. Daniel Marchac.

08:05 a.m. Lic. Diodoro Carrasco Altamirano.
Governor of the State of Oaxaca.

08:10 a.m. PRESIDENTIAL ADDRESS.
Dr. Fernando Ortiz Monasterio

08:40 a.m. "TESSIER LECTURE".
Principles in treatment planning of facial skeleton
anomalies.
Dr. Hugo L. Obwegeser.

09:30 a.m. Coffee break.

Chairman: Dr. Ian Munro
Co-Chairman: Dr. J. Marsh
BASIC SCIENCE

10:00 a.m. Vestibular orientation of the skull by means of the CT-scan
(6 min.)
in craniofacial deformities.
Ph. Pellerin, T. Piral and G. Fenard. (France)

10:07 a.m. Metopic synostosis: Quantitative assessment by CT-scans.
(6 min.)
Kant Lin, J.C. Posnick and P. Chen. (U.S.A.)

10:14 a.m. 3D MRI in craniosynostosis: Identification of previously
(8 min.)
unappreciated neural anomalies.
J.L. Marsh, M. Koby and B. Lee. (U.S.A.)

10:23 a.m. Accuracy and precision of cephalometrics landmarks
(6 min)
determinations in high resolution CT-scans of the skull.
B.F.M.L. van de Ven (The Netherlands).

10:29 a.m. Discussion.

10:39 a.m. CT guided stereolithography as a new tool in craniofacial
(6 min.)
surgery.
Drs. H. Anderl, D. Zur Nedden, W. Mühlbauer and
K. Twerdy. (Austria)
Use in craniofacial surgery of skull replicas constructed using laser lithography. D. Hirabayashi, A. Sakurai, K. Harii and Y. Sugawara. (Japan)

Assessment of craniofacial growth in rats with early resection of zygomatic arch. M. Martinez Elizondo, A. Fuente del Campo and L. Melloni. (Mexico)

Discussion.

Coffee break

Chairman: Dr. A.S. Wolfe.
Co-Chairman: Dr. J.C. Posnick.
BASIC SCIENCE

The critical role of the dura mater in maintaining patency of cranial sutures. L. Opperman, R. Ogle and J. Persing. (U.S.A.)

The importance of the dura in healing of cranial bone. P. Craig Hobar, R. Wilson and J. Zerwekh. (U.S.A.)


Potentiation of bone growth factor by coral and fibrinogen. E. Arnaud, M. C. de Vernejoul. (France)

Discussion.

How safe is the harvesting of cranial bone grafts? Analysis of 11,402 cases. R. Kline and A. S. Wolfe. (U.S.A.)

The influence of bony architecture upon membranous bone graft survival. M. H. Newman. (U.S.A.)
12:16 p.m.  Posttraumatic defects of the skull and forehead-
(6 min.) Reconstruction by split calvarian grafts.
           H.G. Luhr. (Germany).

12:22 p.m.  Discussion.

**Chairman: Dr. P. Manson.**
**Co-Chairman: Dr H.G. Luhr.**

**RIGID FIXATION**

12:33 p.m.  The new Poly-L-lactide (PLLA) wire in craniectomy
(3 min.) closures, an experimental study.
           P. Mäkelä, W. Serlo, T. Pohjonen, P. Törmälä and
           M. Kallioinen. (Finland)

12:37 p.m.  A comparative study of the effects of biodegradable and
(6 min.) titanium plating systems on cranial growth and morphol-
           ogy: Experimental study in Beagles.
           K.E. Salyer, J. Bardach, C.A. Squier, K.M. Kellin. (U.S.A.)

12:44 p.m.  Experimental studies on biodegradable plates and screws:
(6 min.) Memory relapse and degradations kinetics.
           H. W. Losken, A. Tschakaloff, M. Mooney, A. Losken, V.
           Open, T. Smith and A. Burrows. (U.S.A.)

12:51 p.m.  Effects of resorbable coupling fixation on craniofacial
(3 min.) growth.
           B.L. Eppley and A.M. Sadove. (U.S.A.)

12:55 p.m.  The effects of rigid fixation on craniofacial growth in the
(6 min.) infant primate.
           M. Yaremchuck. (U.S.A.)

01:02 p.m.  Fixation with absorbable material in reconstruction of infant
(6 min.) with craniosynostosis.
           H.C. Vasconez. (U.S.A.)

01:09 p.m.  To plate or not plate: A multi-institution, four-year experi-
(3 min.) ence with cranial micro-plating system.
           B.A. Toth, R.F. Keating and S. Schendel. (U.S.A.)

01:13 p.m.  Skull reconstruction, rigid fixation and fiscal responsability.
(6 min.) I.R. Munro, J.A. Fearon and D.A. Bruce (U.S.A.)
01:19 p.m.  Discussion.

01:30 p.m.  Lunch.

**Chairman: Dr. D. Marchac.**

**Co-Chairman: Dr. D. Ousterhout.**

**CONGENITAL AND FLAPS.**

03:00 p.m.  Automated craniofacial surgical design.  
(8 min.)  C. Cutting, D. Khorramabadi, B. Haddad, F. Bookstein and J. McCarthy. (U.S.A.)

03:09 p.m.  Extradural dead space following monobloc and facial bipartition osteotomies for reconstruction of craniofacial malformations.  
(6 min.)  J.C. Posnick, M.M. Al-Qattan and D. Armstrong. (U.S.A.)

03:16 p.m.  Getting to the base of Apert syndrome.  
(6 min.)  I.W.R. Holten (Australia).

03:22 p.m.  Discussion.

03:32 p.m.  The paleontological origins of man and their influence on craniofacial morphology.  
(8 min.)  M.M. Anous. (U.S.A.).

03:41 p.m.  Temporal relationship between changes in sleep state, intracranial pressure and upper airway obstruction in children with craniosynostosis.  
(6 min.)  R. Hayward, S. Gonzalez, R. Lane, A. Mackersie, W. Harkness and B. Jones. (UK)

03:48 p.m.  The influence of intracranial pressure monitoring on the staged surgical management of craniosynostosis.  
(3 min.)  B.M. Jones, R.D. Hayward, W. Harkness and D. Thompson. (U.K.).

03:52 p.m.  Upper airway changes in a rabbit model for craniofacial synostosis.  
(3 min.)  H. Arlis, P. Rosenberg, R.F. Ward and G. LaTrenta. (U.S.A.)

03:56 p.m.  Cranioorbital skeletal deformities in patients with torticollis.  
(3 min.)  M.B. Habal. (U.S.A.).

03:59 p.m.  Discussion.
04:09 p.m. (6 min.) Histological and radioisotopical analysis of the skull graft and osteofacial flap: Experimental study in rabbits. F.H.S. Parro, F. Viterbo, B. Viterbo, A. Ueda F. Pinea and S.A. Zanini. (Brazil).

04:16 p.m. (6 min.) The effects of temporalis muscle manipulation on skull morphology and craniofacial growth: A rabbit model. M. Brennan and O. Antonyshyn. (Canada).

04:23 p.m. (3 min.) The osteoneogenic potential of the temporalis periosteal flap. R. Rival, O. Antonyshyn, J. Phillips and C.Y. Pang. (Canada).

04:27 p.m. (3 min.) Occipital flap with extended pedicle. P. Dogliotti and R. Bennun. (Argentina).

04:31 p.m. (3 min.) Tubed free flap for coverage of craniofacial defects. E. Auclair, D. Marchac, M. Prevot, D. Renier and A. P. Khan. (France).

04:34 p.m. Discussion.

04:44 p.m. Coffee Break.

Chairman: Dr. L. Whitaker.
Co-Chairman: Dr. B. Jones.
CONGENITAL

05:10 p.m. (3 min.) A new technique for prevention of burr hole defects in craniotomy. J.F. Hönig. (Germany).

05:14 p.m. (8 min.) The autodynamic remodeling of the skull following early surgery. W. Muhlbauer, H. Anderl, J. Fairley and F. Hoppner. (Germany)

05:30 p.m. (6 min.)
Analysis and treatment of severe trigonocephaly.
(U.S.A.)

05:37 p.m. (6 min.)
Early correction of skull deformity in scaphocephaly.
R. Roddi, J.M. Vaandrager and J.C. Van der Mullen.
(The Netherlands).

05:43 p.m.
Discussion.

05:53 p.m. (6 min.)
Accurate fronto-orbital reconstruction without significant imaging artifact.
P.K. Sullivan and A. Rozelle. (U.S.A.)

06:00 p.m. (6 min.)
Usefulness of floating sagittal bar technique in surgical correction of craniosynostosis.
H. Kamiishi, N. Isogai and M. Kosaka. (Japan)

06:07 p.m. (8 min.)
Timing, sequence and type of surgery for complex craniosynostosis.
L. Whitaker, S. Bartlett and R. Havlik. (U.S.A.)

06:16 p.m. (3 min.)
Recurrent craniosynostosis.

06:20 p.m. (6 min.)
Recurrent craniosynostosis: When and why?
D. Renier, G. Saint Rose and D. Marchac. (France).

06:26 p.m.
Discussion.

06:36 p.m.
Adjourn.
Chairman: Dr. K. Salyer.
Co-Chairman: Dr. H. Anderl.
CONGENITAL

08:00 a.m.  Skeletal analysis of craniofacial asymmetries on accurate replicas of the skull.
            (6 min.)
            A. Sakurai, S. Hirabayashi, Y. Sugawa, K. Harii, T. Kihara, N. Shigemura, K. Furahata. (Japan).

08:07 a.m.  Symptomatic improvement in synostosis conditions following forehead advancement.
            (3 min.)

08:11 a.m.  Crouzon syndrome: Quantitative assessment of present ing deformity and surgical results based on CT scans.
            (6 min.)

08:18 a.m.  A treatment plan for Crouzon’s syndrome.
            (8 min.)
            C. Lauritzen, P. Sahling and H. Stephensen. (Sweden)

08:27 a.m.  New dimensions in Crouzon syndrome.
            (6 min.)

08:33 a.m.  Discussion.

08:43 a.m.  Functional and morphological outcome in 57 Apert’s Syndrome.
            (8 min.)
            D. Marchac and D. Renier. (France).

08:52 a.m.  Twenty year experience with early surgery for cranio synostosis II. Pansynostosis and craniofacial synostosis syndromes - Results and unsolved problems.
            (6 min.)
            J.G. McCarthy, S.B. Glasberg, C. B. Cutting. (U.S.A.)

08:59 a.m.  Experience of secondary craniofacial surgery.
            (6 min.)
            T.T. Akizuki and K. Ohmori. (Japan).

09:06 a.m.  Complications in the bilateral orbitofrontal advancement.
            (3 min.)

09:09 a.m.  Discussion.
Chairman: Dr. J. Mulliken.
Co-Chairman: Dr. J. Van der Meulen.
CONGENITAL AND TUMORS

09:20 a.m. Proteus syndrome - A newly recognized hamartomatous syndrome with significant craniofacial dysmorphology. C. Dufresne. (U.S.A.)
(3 min.)

(3 min.)

09:28 a.m. An orbital venous approach to the cavernous sinus. H. Spinelli, S. Falcone and G. Lee. (U.S.A.)
(8 min.)

(3 min.)

09:40 a.m. Discussion.

09:50 a.m. Resection with cardiac bypass for facial vascular malformations. M.L. Lessard, A.R.C. Dobell, H.B. Williams, J. Raymond, R. Tabah. (Canada)
(6 min.)

09:57 a.m. Reconstruction of congenital sphenoid wing absence. Yu-Ray Chen. (Taiwan)
(3 min.)

10:01 a.m. Skull base reconstruction after tumors resection. S. Moreira da Costa. (Brazil)
(6 min.)

10:08 a.m. Some challenges related to the surgery of the base of the skull. O. Contreras, M. Gonzalez and R. Villalobos (Chile)
(6 min.)

10:14 a.m. Discussion.

(3 min.)
(6 min.)

10:35 a.m. Derome approach modification. E. Valencia and M.A. Arraez. (Spain).
(6 min.)

10:42 a.m. The facial split without anosmia: A new technique in cranial base. H. A. Fearon and D.A. Bruce. (U.S.A.).
(6 min.)

10:49 a.m. Posterior anomalies of the central nervous system and skeleton in craniofacial dysostoses. M. Poole and M. Briggs. (UK).
(6 min.)

10:55 a.m. Discussion.

11:05 a.m. Coffee Break.

Chairman: Dr. J.G. McCarthy.
Co-Chairman: Dr. C. Raposo de Amaral
MICROSOMIA, FACIAL CLEFTS AND BONE SUBSTITUTES

11:30 a.m. Mandibular lengthening in the canine using an intraoral device. D.S. Staffenberg, R.J. Wood and J.G. McCarthy. (U.S.A.)
(3 min.)

11:34 a.m. Quantifying mandibular lengthening by distraction for airway obstruction in Treacher Collins syndrome. M.H. Moore, G. Guzman-Stein, T.W. Proudmann and A.H. Abbott. (Australia)
(3 min.)

11:38 a.m. Extended indications for mandibulardistraction: Unilateral, bilateral, and bidirectional. Molina, F. and Ortiz Monasterio, F. (Mexico)
(6 min)

11:45 a.m. Craniofacial microsomia. Mandibular reconstruction with vascularized osteoperiosteal flap in early childhood. P. Iwanyk and L.A. Margaride (Argentina)
(6 min.)

11:51 a.m. Discussion.

12:01 p.m. Craniofacial clefts with an associated lipoma. B.J. Van R. Zeeman. (South Africa).
(3 min.)
12:05 p.m.  The extended SMAS for malar soft tissue augmentation in Treacher Collins syndrome.  
L.V. Carson and R.C. Mixter. (U.S.A.)  
(6 min.)

12:12 p.m.  Minimization of scars in orbito-facial clefting correction.  
J.C.H. van der Meulen, R. Roddi and J.M. Vaandrager.  
(The Netherlands.)  
(6 min.)

12:19 p.m.  Demineralized bone allografts, hydroxyapatite and alternative bone figures in cranial bone defects.  
F.A. Papay. (U.S.A.)  
(6 min.)

12:26 p.m.  Perforated demineralized bone- A 3 year update.  
K.E. Salyer, K. Hopkins and R. G. Taylor. (U.S.A.)  
(6 min.)

12:32 p.m.  Discussion.  

12:42 p.m.  The impact of rapid demineralization on bone bending strength: A potential clinical technique.  
D. Azurin, R. J. Havlik, L.A. Whitaker and S. Bartlett. (U.S.A.)  
(6 min.)

12:49 p.m.  Cyanoacrylate fixation of the craniofacial skeleton: An experimental study.  
M.T.J. Amarante, M. Constantinescu, D. O ’Connor and M. Yaremchuck. (U.S.A.)  
(3 min.)

12:53 p.m.  Tricalcium phosphate and osteogenin: A bioactive onlay bone graft substitute.  
A.S. Breitbart, D.A. Staffenberg, P.M. Glat, N. Cunningham,  
A.H. Reddi, J. Ricci, G. Steiner and C.T. Thorne. (U.S.A.)  
(6 min.)

01:00 p.m.  Soft tissue versus bone in the aesthetic aspect of the face.  
C. Raposo de Amaral. (Brazil)  
(6 min.)

01:06 p.m.  Discussion.  

01:16 p.m.  Lunch.  

Chairman: Dr. H. Kawamoto.  
Co-Chairman: Dr. C. Lauritzen.  
ORBIT AND TRAUMA.  

02:30 p.m.  Versatility of living bone grafting in orbital reconstruction.  
S. Kobayashi, K. Ohmori, Y. Sakai and T. Akizuki. (Japan)  
(3 min.)
02:34 p.m. (6 min.) The concept of the orbital-globe relationship in craniofacial surgery.

02:41 p.m. (6 min.) Correction of vertical orbital dystopia.
J. Gross and S.A. Wolfe. (U.S.A.)

02:47 p.m. (6 min.) Surgical reconstruction of the orbit after resection of skull-base tumors.
H.P. Howaldt and A. Frydrych. (Germany).

02:53 p.m. Discussion.

03:03 p.m. (6 min.) Dramatic late complications of craniofacial fractures.
E.S. Dejerine, L.C. Merville, P.Bui, G.de Saint Jorre. (France)

03:10 p.m. (6 min.) Frontal sinus fractures- A comparison of medical and surgical treatment options.
N.Clark, C. Gordon, S.Slezak, B. Robertson and P. Manson. (U.S.A.)

03:17 p.m. (6 min.) The clinical presentation and surgical management of growing craniofacial fractures in the pediatric patient.
S.P. Bartlett, R.Havlik and L. Sutton. (U.S.A.)

03:23 p.m. Discussion.

03:33 p.m. Visit to the archeological area of Monte Alban.
TUESDAY, OCTOBER 26, 1993.
Chairman: Dr. W. Mühlbauer.
Co-Chairman: Dr. W. Lashken.
CONGENITAL

08:00 a.m. (6 min.) Distraction osteogenesis of the craniofacial skeleton: A 1993 overview.
(U.S.A.).

08:07 a.m. (3 min.) The Saethre-Chotzen syndrome.
P. Sahlin and C. Lauritzen. (Sweden)

08:11 a.m. (3 min.) Anthropometry analysis of the phenotypic spectrum in Saethre-Chotzen syndrome.
B.L. Padwa. (U.S.A.)

08:15 a.m. (6 min.) A newly recognized type of autosomal dominant craniosynostosis and assignment of a genetic locus to the long arm of chromosome 5.
J.B. Mulliken (U.S.A.)

08:22 a.m. (6 min.) Holoprosencephaly revisited.

08:28 a.m. Discussion.

08:38 a.m. (3 min.) Cranial growth following unilateral coronal suturectomy in cats.
D. Marshall and S. A. Schendel. (U.S.A.)

08:42 a.m. (3 min.) Fronto-orbital fibrous dysplasia.
R. Villalobos, A. Zuleta and S. Valenzuela. (Chile)

08:46 a.m. (3 min.) Frontonasal and craniofrontonasal dysplasia: Preoperative quantitative description of the cranio-orbital-zygomatic region based on computed and conventional tomography.

08:50 a.m. (6 min.) Craniofrontonasal dysplasia: A phenotypic review.
D. Saavedra Ontiveros. (Mexico)
08:57 a.m.  Strabismus and nystagmus in craniofrontonasal dysplasia.
(6 min.)  E. Limon de Brown and M. Stark Feldman. (Mexico).

09:04 a.m.  A prospective study of the presentation and outcome of strabismus and head posture in patients with plagiocephaly.

09:07 a.m.  Discussion.

Chairman: Dr. T. Caronni.
Co-Chairman: Dr. O. Contreras.
VIDEO

9:18 a.m.  The Laser surface scanner for facial anthropometry.
(10 min.)  D.B. Baca. (U.S.A.)

9:28 a.m.  Craniofacial surgical simulation and intraoperative confirmation.
(10 min.)  C. Vander Kolk, J. Zinreich, B. Carson and P. Manson. (U.S.A.)

09:38 a.m.  Versatility of nasal monobloc osteotomy.
(10 min.)  G.C. Lovaas. (U.S.A.)

09:48 a.m.  Transfacial approach to a basal encephalocele.
(10 min.)  R.C. Mixter and L.V. Carson. (U.S.A.)

09:58 a.m.  Resection and reconstruction of extensive frontal orbital fibrous dysplasia.
(10 min.)  S.P. Hardy, J. Squires, L. Morales Jr., M. Walker and R. Anderson. (U.S.A.)

10:08 a.m.  Discussion.

10:23 a.m.  Coffee Break.
Chairman: Dr. D. Ousterhout.
Co-Chairman: Dr. A. Fuente del Campo.
TUMORS AND MIDFACE.


11:10 a.m. Discussion.


11:24 a.m. Lefort III Midfacial advancement in cleft palate patients. A.D. Denny. (U.S.A.).


11:41 a.m. Discussion.

11:51 a.m. Decision-making in total aesthetic facial contouring. L. Whitaker. (U.S.A.)
11:58 a.m.  Nasal preservation in cranio-facial surgery.
           (8 min.)  A. Fuente del Campo. (Mexico)

12:07 p.m.  Lengthening the nose: A manoeuvre from craniofacial
           surgery.
           (8 min.)  S.A. Wolfe. (U.S.A.).

12:16 p.m.  Repairing facial bone fractures using a new navigation
           system.
           (3 min.)  Y. Sakai, E. Ohkubo, E. Watanabe and K. Ohmori (Japan).

12:20 p.m.  Complications of rigid fixation in infants and small
           children.
           (6 min.)  I.R. Munro, J.A. Fearon and D.A. Bruce. (U.S.A.)

12:26 p.m.  Discussion.

12:36 p.m.  Adjourn.

13:00 p.m.  BUSINESS MEETING.
           Active members only.
NOTAS:

10:40 a.m. - Comité de coordinación de la investigación (3 min.)
10:53 a.m. - Cálculos y técnicas de laboratorio (3 min.)
10:57 a.m. - Comité de coordinación de la investigación (3 min.)
11:03 a.m. - Comité de coordinación de la investigación (3 min.)
11:04 a.m. - Business meeting (15 min.)
11:10 a.m. - Business meeting (15 min.)
11:20 a.m. - Business meeting (15 min.)
11:24 a.m. - Business meeting (15 min.)
11:31 a.m. - Business meeting (15 min.)
11:39 a.m. - Business meeting (15 min.)
11:41 a.m. - Business meeting (15 min.)
11:51 a.m. - Business meeting (15 min.)

11:58 a.m. - Business meeting (15 min.)
12:00 p.m. - Business meeting (15 min.)
12:05 p.m. - Business meeting (15 min.)