



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

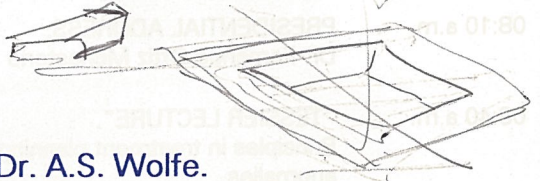
- 10:00 a.m. Vestibular orientation of the skull by means of the CT-scan
(6 min.) in craniofacial deformities.
Ph. Pellerin, T.Piral and G.Fenard. (France)
- 10:07 a.m. Metopic synostosis: Quantitative assessment by CT-scans.
(6 min.) Kant Lin, J.C.Posnick and P.Chen. (U.S.A.)
- 10:14 a.m. * 3D MRI in 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)

BARTZCO

10:46 a.m. Use in craniofacial surgery of skull replicas constructed
(6 min.) using laser lithography.
D.Hirabayashi, A.Sakurai, K.Harii and Y.Sugawara. (Japan)

10:53 a.m. Assessment of craniofacial growth in rats with early
(6 min.) resection of zygomatic arch.
M. Martinez Elizondo, A. Fuente del Campo and
L.Melloni.(Mexico)

11:00 a.m. Discussion.



11:10 a.m. Coffee break

Chairman: Dr. A.S. Wolfe.

Co-Chairman: Dr. J.C.Posnick.

BASIC SCIENCE

11:30 a.m. The critical role of the dura mater in maintaining patency
(3 min.) of cranial sutures.
L.Opperman, R. Ogle and J. Persing. (U.S.A.)

11:34 a.m. The importance of the dura in healing of cranial bone.
(3 min.) P.Craig Hobar, R. Wilson and J. Zerwekh. (U.S.A.)

11:38 a.m. Histochemical evaluation of developing calvarial bone:
(6 min.) Implications in complex craniosynostosis.
M.J.Burke, K.R. Winston and L. Ketch. (U.S.A.)

11:45 a.m. Bone growth factors in human craniosynostosis.
(3 min.) S. D.Bresnick. Michael Cohen and S. Schendel. (U.S.A.)

11:49 a.m. Potentiation of bone growth factor by coral and fibrino-
(6 min.) gen.
good
E. Arnaud, M.C. de Vernejoul. (France)

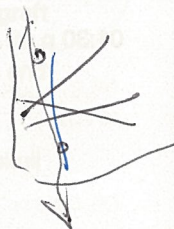
11:55 a.m. Discussion.

12:05 p.m. How safe is the harvesting of cranial bone grafts?.
(3 min.) Analysis of 11,402 cases.
R. Kline and A.S. Wolfe. (U.S.A.)

12:09 p.m. The influence of bony architecture upon membranous
(6 min.) bone graft survival.
M. H. Newman. (U.S.A.)

12:16 p.m.
(6 min.)

Posttraumatic defects of the skull and forehead-
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.
(3 min.)

The new Poly-L-lactide (PLLA) wire in craniectomy
closures, an experimental study.
P. Mäkela, W. Serlo, T. Pohjonen, P. Törmälä and
M. Kallioinen. (Finland)



12:37 p.m.
(6 min.)

A comparative study of the effects of biodegradable and
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.
(6 min.)

Experimental studies on biodegradable plates and screws:
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.
(3 min.)

Effects of resorbable coupling fixation on craniofacial
growth.
B.L. Eppley and A.M. Sadove. (U.S.A.).



12:55 p.m.
(6 min.)

The effects of rigid fixation on craniofacial growth in the
infant primate.
M. Yaremchuck. (U.S.A.)

01:02 p.m.
(6 min.)

Fixation with absorbable material in reconstruction of infant
with craniosynostosis.
H.C. Vasconez. (U.S.A.)

01:09 p.m.
(3 min.)

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

01:13 p.m.
(6 min.)

Skull reconstruction, rigid fixation and fiscal responsibility.
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 biparti-
(6 min.) tion osteotomies for reconstruction of craniofacial malfor-
mations.
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
(8 min.) craniofacial morphology.
M.M. Anous. (U.S.A.).

03:41 p.m. Temporal relationship between changes in sleep state,
(6 min.) *all other*
sqm
we can use
intracranial pressure and upper airway obstruction in chil-
dren with craniosynostosis.
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
(3 min.) staged surgical management of craniosynostosis.
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
(3 min.) *Krayed I head flexed*
also skull proce
synostosis.
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)

05:23 p.m.
(6 min.) Treatment of positional Plagiocephaly utilizing the cranial remodeling orthosis.
(D.O.C.). C.E.Ripley, J.Pomato, S.P. Beals, K.H. Manwaring, E.F. Joganic and D. Moss. (U.S.A.)

05:30 p.m.
(6 min.)

Analysis and treatment of severe trigonocephaly.
R. J. Havlik, D. Azurin, S. P. Bartlett and L. Whitaker.
(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.
J.H. Goldin, M.J.C. Wake and A.D. Hockley. (UK).

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.

MONDAY, OCTOBER 25, 1993.

Chairman: Dr. K. Salyer.

Co-Chairman: Dr. H. Anderl.

CONGENITAL

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

08:07 a.m. Symptomatic improvement in synostosis conditions
(3 min.) following forehead advancement.
D. K. Ousterhout. (U.S.A.) Forehead.

08:11 a.m. Crouzon syndrome: Quantitative assessment of present
(6 min.) ing deformity and surgical results based on CT scans.
J.C. Posnick, K. Ling, B.J. Jhawar, and D.Armstrong.
(U.S.A.).

- Skeletable -

*Nice
Tachy*

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.) T.W. Proudman, A.H. Abbot, D.J. Netherway and
D.J. David. (Australia).

08:33 a.m. Discussion.

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

Just 10 of 100

08:52 a.m. Twenty year experience with early surgery for cranio
(6 min.) synostosis:II. Pansynostosis and craniofacial synostosis
syndromes - Results and unsolved problems.
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.) R.Salvan, M.J. Ochotorena, F. Cordobes, M.J. Muñoz and
J. Esparza. (Spain).

09:09 a.m. Discussion.

Chairman: Dr.J. Mulliken.

Co-Chairman: Dr. J. Van der Meulen.

CONGENITAL AND TUMORS

- 09:20 a.m. (3 min.) Proteus syndrome - A newly recognized hamartomatous syndrome with significant craniofacial dysmorphism.
C. Dufresne. (U.S.A.)
- 09:24 a.m. (3 min.) Encephalocele morphogenetic explanation.
J.M.Vaandrager, C. Verwey-Keers, J.C. Van der Meulen and E.W. Hoving (The Netherlands).
- 09:28 a.m. (8 min.) An orbital venous approach to the cavernous sinus.
H. Spinelli, S. Falcone and G. Lee. (U.S.A.)
- 09:37 a.m. (3 min.) Long term follow-up of malignant skull base tumors prognosis and prevention of complications.
R.J. Smith and I.T. Jackson (U. S. A.).
- 09:40 a.m. Discussion. *Why delay resection*
- 09:50 a.m. (6 min.) Resection with cardiac bypass for facial vascular malformations.
M.L. Lessard, A.R.C. Dobell, H.B.Williams, J. Raymond, R. Tabah. (Canada)
- 09:57 a.m. (3 min.) Reconstruction of congenital sphenoid wing absence.
Yu-Ray Chen. (Taiwan)
- 10:01 a.m. (6 min.) Skull base reconstruction after tumors resection.
S. Moreira da Costa. (Brazil)
- 10:08 a.m. (6 min.) Some challenges related to the surgery of the base of the skull.
O. Contreras, M. Gonzalez and R. Villalobos (Chile)
- 10:14 a.m. Discussion.
- 10:24 a.m. (3 min.) Combined treatment of craniofacial tumors by excision and brachytherapy.
M.R. Wexler, Z. Wechler, A. Neuman, A. Weinberg, F. Umansky and J. Elidan. (Israel).

10:28 a.m. Classification of transfacial approaches in treatment of
(6 min.) tumors of the anterior skull base and clivus.
S.P.Beals, E .F. Joganic, R.F. Spetzler, M.G.Hamilton and
J.M.Herman. (U.S.A.)

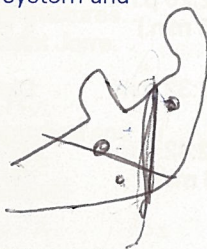
10:35 a.m. Derome approach modification.
(6 min.) E. Valencia and M.A. Arraez. (Spain).

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

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

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
(3 min.) device.
D.S. Staffenberg, R.J. Wood and J.G. McCarthy. (U.S.A.)

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

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

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

11:51 a.m. Discussion.

12:01 p.m. Craniofacial clefts with an associated lipoma.
(3 min.) B.J. Van R. Zeeman. (South Africa).

- 12:05 p.m.
(6 min.) The extended SMAS for malar soft tissue augmentation in Treacher Collins syndrome.
L.V. Carson and R.C. Mixer. (U.S.A.)
- 12:12 p.m.
(6 min.) Minimization of scars in orbito-facial clefting correction.
J.C.H. van der Meulen, R. Roddi and J.M. Vaandrager.
(The Netherlands).
- 12:19 p.m.
(6 min.) Demineralized bone allografts, hydroxyapatite and alternative bone figures in cranial bone defects.
F.A. Papay.(U.S.A.)
- 12:26 p.m.
(6 min.) Perforated demineralized bone- A 3 year update.
K.E.Salyer, K.Hopkins and R. G. Taylor.(U.S.A.)
- 12:32 p.m. Discussion.
- 12:42 p.m.
(6 min.) 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.)
- 12:49 p.m.
(3 min.) Cyanoacrylate fixation of the craniofacial skeleton: An experimental study.
M.T.J. Amarante, M.Constantinescu, D. O'Connor and M. Yaremchuck. (U.S.A.)
- 12:53 p.m.
(6 min.) 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.)
- 01:00 p.m.
(6 min.) Soft tissue versus bone in the aesthetic aspect of the face.
C. Raposo de Amaral. (Brazil)
- 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.
(3 min.) Versatility of living bone grafting in orbital reconstruction.
S. Kobayashi, K. Ohmori, Y. Sakai and T.Akizuki. (Japan)

- 02:34 p.m.
(6 min.) The concept of the orbital-globe relationship in craniofacial surgery.
J.B. Mulliken, D.E. Altobelli, and S.L. Godwin. (U.S.A.)
- 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. Distraction osteogenesis of the craniofacial skeleton:
(6 min.) A 1993 overview.
J.G. McCarthy, A. Breibart, S. Glasbeg, A. Gosain, B.
Grayson, N. Karp, J. Schreiber, D. Staffenberg, C. Thorne,
and R. Wood.
(U.S.A.).
- 08:07 a.m. The Saethre-Chotzen syndrome.
(3 min.) P. Sahlin and C.Lauritzen. (Sweden)
- 08:11 a.m. Anthropometry analysis of the phenotypic spectrum in
(3 min.) Saethre-Chotzen syndrome.
B.L.Padwa. (U.S.A.)
- 08:15 a.m. A newly recognized type of autosomal dominant
(6 min.) craniosynostosis and assignment of a genetic locus to
the long arm of chromosome 5.
J.B. Mulliken (U.S.A.)
- 08:22 a.m. Holoprosencephaly revisited.
(6 min.) H.K. Kawamoto, D.L.Elias and L.F. Wilson.(U.S.A.).
- 08:28 a.m. Discussion.
- 08:38 a.m. Cranial growth following unilateral coronal suturectomy
(3 min.) in cats.
D. Marshall and S. A. Schendel.(U.S.A.)
- 08:42 a.m. Fronto-orbital fibrous dysplasia.
(3 min.) R. Villalobos, A. Zuleta and S. Valenzuela. (Chile)
- 08:46 a.m. Frontonasal and craniofrontonasal dysplasia: Preoperative
(3 min.) quantitative description of the cranio-orbito-zygomatic
region based on computed and conventional
tomography.
S. Moffat, J. Posnick, G.Pron, D. Armstrong. (U.S.A.)
- 08:50 a.m. Craniofrontonasal dysplasia: A phenotypic review.
(6 min.) D. Saavedra Ontiveros. (Mexico)

- 08:57 a.m.
(6 min.) Strabismus and nystagmus in craniofrontonasal dysplasia.
E. Limon de Brown and M. Stark Feldman. (Mexico).
- 09:04 a.m.
(3 min.) A prospective study of the presentation and outcome of strabismus and head posture in patients with plagiocephaly.
A.K. Gosain, M. Steele, J.G. McCarthy and C.H. Thorne. (U.S.A.)
- 09:07 a.m.
(3 min.) Discussion.
- Chairman: Dr. T. Caronni.**
Co-Chairman: Dr. O. Contreras.
VIDEO
- 9:18 a.m.
(10 min.) The Laser surface scanner for facial anthropometry.
D.B. Baca. (U.S.A.).
- 9:28 a.m.
(10 min.) Craniofacial surgical simulation and intraoperative confirmation.
C. Vander Kolk, J. Zinreich, B. Carson and P. Manson. (U.S.A.).
- 09:38 a.m.
(10 min.) Versatility of nasal monobloc osteotomy.
G.C.Lovaas. (U.S.A.)
- 09:48 a.m.
(10 min.) Transfacial approach to a basal encephalocele.
R.C.Mixter and L.V. Carson. (U.S.A.)
- 09:58 a.m.
(10 min.) Resection and reconstruction of extensive frontal orbital fibrous dysplasia.
S.P. Hardy, J.Squires, L Morales Jr., M. Walker and R. Anderson.(U.S.A.).
- 10:08 a.m.
(3 min.) Discussion.
- 10:23 a.m.
(3 min.) Coffee Break.

Chairman: Dr. D. Ousterhout.
Co-Chairman: Dr. A. Fuente del Campo.
TUMORS AND MIDFACE.

- 10:46 a.m. (6 min.) Orbital hypertelorism: definitions, pathogenesis, treatment and results of 100 cases 1975-1993.
D.J. David. (Australia).
- 10:53 a.m. (3 min.) Medial canthopexy: An experimental biomechanical study.
A.B. Dagum and O. Antonyshyn. (Canada).
- 10:57 a.m. (6 min.) Midface advancement in the canine without osteotomies.
D.A. Staffenberg, R.J. Wood, S.B. Glasberg and J.G. McCarthy. (U.S.A.).
- 11:04 a.m. (6 min.) Midface advancement by gradual distraction: A followup study.
A. Rachmiel, I.T. Jackson, L. Clayman. (Israel).
- 11:10 a.m. Discussion.
- 11:20 a.m. (3 min.) Postoperative movement of rigidly fixed midface osteotomies.
R.J. Wood, B.H. Grayson, J. G. McCarthy, C.B. Cutting, and C.H. Thorne. (U.S.A.).
- 11:24 a.m. (6 min.) Lefort III Midfacial advancement in cleft palate patients.
A.D. Denny. (U.S.A.).
- 11:31 a.m. (6 min.) Facial sensibility in cleft and non-cleft adolescents one year after undergoing Lefort I osteotomy.
J.C. Posnick, M.M. Al-Qattan and G. Pron. (U.S.A.).
- 11:38 a.m. (3 min.) Surgical treatment for prominent gonial angle- Its procedure and a new instrument.
S. Kyutoku, A. Yanagida, K. Kusumoto and Y. Ogawa. (Japan).
- 11:41 a.m. Discussion.
- 11:51 a.m. (6 min.) Decision-making in total aesthetic facial contouring.
L. Whitaker. (U.S.A.).

- 11:58 a.m.
(8 min.) Nasal preservation in cranio-facial surgery.
A. Fuente del Campo. (Mexico)
- 12:07 p.m.
(8 min.) Lengthening the nose: A manoeuvre from craniofacial surgery.
S.A. Wolfe. (U.S.A.).
- 12:16 p.m.
(3 min.) Repairing facial bone fractures using a new navigation system.
Y.Sakai, E. Ohkubo, E. Watanabe and K.Ohmori.(Japan).
- 12:20 p.m.
(6 min.) Complications of rigid fixation in infants and small children.
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:

11:58 a.m. (8 min.)	11:58 a.m. (8 min.)
12:07 p.m. (8 min.)	12:07 p.m. (8 min.)
12:18 p.m. (3 min.)	12:18 p.m. (3 min.)
12:30 p.m. (8 min.)	12:30 p.m. (8 min.)
12:38 p.m. (3 min.)	12:38 p.m. (3 min.)
12:58 p.m. (3 min.)	12:58 p.m. (3 min.)
1:04 p.m. (3 min.)	1:04 p.m. (3 min.)
1:10 p.m. (3 min.)	1:10 p.m. (3 min.)
1:20 p.m. (3 min.)	1:20 p.m. (3 min.)
1:24 p.m. (3 min.)	1:24 p.m. (3 min.)
1:27 p.m. (3 min.)	1:27 p.m. (3 min.)
1:30 p.m. (3 min.)	1:30 p.m. (3 min.)
1:41 p.m. (3 min.)	1:41 p.m. (3 min.)
1:51 p.m. (3 min.)	1:51 p.m. (3 min.)



INTERNATIONAL SOCIETY OF CRANIOFACIAL SURGERY