



INDIAN PROSTHODONTIC SOCIETY CONFERENCE

23rd - 25th

NOVEMBER - 2001
RAMOJI FILM CITY, HYDERABAD

Quintessence
International

— Official Publication

Highlights of the conference

Trade fair: A masive trade fair of 80 stalls will be in place during the conference, where it is expected that several new products will be on display and demonstration. **Table clinics:** On conference days, Table clinics will be held by professionals. Computer displays, Technical Manuals, Posters, Models etc will be displayed to give the first hand experience. **Theme Dinners:** Exciting theme dinners have been organised, on 23rd night at Sun City, where the ambience will instantly transport you to a totally different world. **About the venue:** The 400 year old charismatic Hyderabad has a lot to offer. The Golkonda Fort, The Charminar, The Salarjung Museum, The Monolith Buddha Statue in the tranquil lake of Hussain Sagar and the new IT landmark Hi-Tech city are just a few of the many favourite tourist spots. One can shop in the Lad bazar for bangles or look for quality Pearls or take a trip to the near-by Pochampally village to buy Pochampally sarees. The chosen venue for the in-house conference is the picturesque Ramoji film City — the most lavish & exclusive destination, and probably one of the finest in the world.

Keynote and Guest lectures

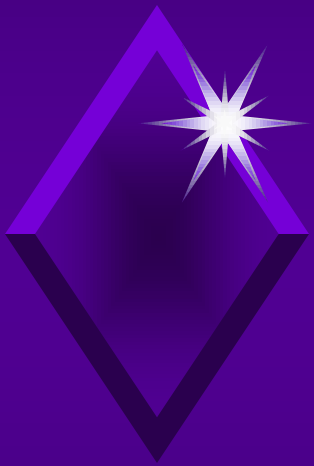
- Dr. Raj K Raja Rayan**, Dean of Royal college of Surgeons, London
Subject: Fixed Partial Dentures a Modality of Treatment
- Dr. Zafrulla Khan**, Head of James Graham Brown Cancer Center; Louisville
Subject: Role of Maxillofacial Prosthodontist in New Millennium
- Dr. Ashjorn Jokstad**, Faculty; University of Oslo
Subject: Cost, Benefit Analysis in Prosthodontics.
- Dr. EGR Solomon**, Founder member of IPS Senior Teacher; Madras
Subject: Complete Denture Harmony
- Dr. Chandrasekharn Nair**, Head of the Department, Ambedkar Dental College Bangalore
Subject: Maxillofacial Prosthetics, Stress Management
- Dr. Firdaus S. Jafrei**, Carol Stream IL
Subject: Full Mouth Rehabilitation Using Multiple Implant Modalities.
- Dr. Martin Steinbauer**, Private Practice in Sonthofen
Subject: Telescopic Crowns and Implant Possibilities
- Dr. Ajit G. Shetty**, Bombay
Subject: Laminates
- Dr. Dilip Deshpande**, Former Prof & Head, Nair Dental College Bombay
Subject: Implant Occlusion & Attachments in Removable Prosthesis
- Dr. Sadasiva Shetty**, Dean, Bapuji Dental College; Davangere
Subject: Prostho Ortho Relation
- Dr. Maj. Gen. T. Ravindranath**, New Delhi
Subject: Implant Indian Perspective
- Dr. Swarajya Bharathi Sudhapalli**, Faculty in KLE Dental College, Belgaum
Subject: Mandibular Flexure (Clinical Aspects)
- Dr. K. Balasubramanyam**, Director NFTDC Hyderabad
Subject: Indignization of Dental Materials
- Dr. Sabita Ram**, Faculty in Govt. Dental College Bombay
Subject: Impression Techniques in Removable Prosthetics
- Dr. Suhasini J Nagda**, Head of Prosthodontics, Nair Dental College Bombay
Subject: Soft Lined Dentures
- Dr. Suresh Meshram**, Head of the Dept. Govt Dental College Bombay
Subject: Partial Denture Design
- Dr. Mahesh Verma**, Head of Dental wing MAMC New Delhi
Subject: Denture Bases and Advances
- Dr. Milind Karmarkar**, Bombay
Subject: Hybrid Prosthesis
- Dr. Shavir S. Nooryezdan**, Implantologist, Bombay
Subject: Creating the ultimate aesthetics in the single tooth implant restoration
- Dr. Kiran Kelkar**, Bombay
Subject: Harmony between Lab & Clinical Practice
- Dr. Faber Cologne**
Subject: Galvano Formed Copings

8 pre conference courses on 21st and 22nd November 2001 will be held at National Institute of Health and Family Welfare Vengal Rao Nagar and Hotel Green Park, Hyderabad.

- Hinge axis registration and transfer and Gothic arch tracing and role of articulators in Prosthodontics; Course conducted by Dr. Raj K. Raja Rayan and Dr. E.G.R. Solomon.
- Maxillofacial Prosthesis — Silastic materials in Maxillofacial prosthetics; conducted by Dr. Zafrulla Khan
- Clinical and laboratory procedures for ceramic laminate veneers. Conducted by Dr. T.V. Padmanabhan and Mr. Sameer
- Prosthetic protocol of implant — transitional implants: Course conducted by Dr. Martin Stienbauer and Ajit Shetty
- Galvano formed copings; conducted by Dr. Faber and Andreas Hubben
- Hands on course on Metal free ceramics : conducted by Andreas Hubben
- Hands on course on Geo waxing technique : conducted by Mr. Michael Hemmer
- Implant loading and management of integrated implants: Course conducted by Dr. Firdaus S. Jafri and Mrs. Tracy Stuart.

Conference Secretariat : Dr. K. Mahendranadh Reddy, The Dental Clinic, 36, Ground Floor, "Topaz", on amrutha Hills, 6-3-883, Punjagutta, Hyderabad - 500 082. Phone : Clinic 3411841, 3404140. Resi : 3402552, E-mail : mrkareti@eth.net

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Removable prosthodontics, low cost but high benefits?

*Asbjørn Jokstad
Institute of Clinical Dentistry
University of Oslo*



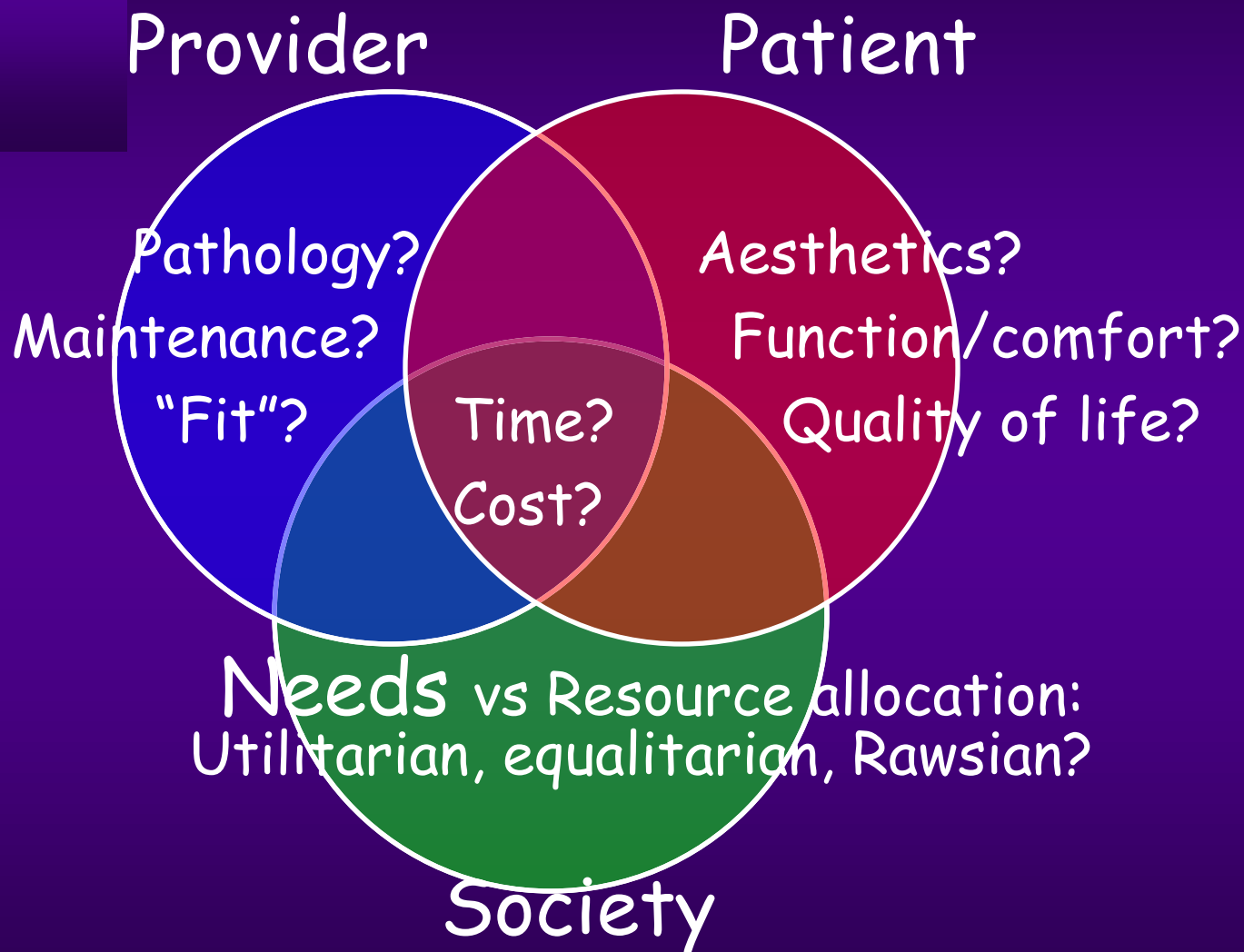
Cost-effectiveness issues

1. From whose perspective should therapy effectiveness be assessed?



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Whose perspective?





Cost-effectiveness issues

1. From whose perspective should therapy effectiveness be assessed?
2. Which indicators should be used to describe health and treatment outcomes, and how can values be assigned to the different indicators?



Cost-effectiveness issues

1. From whose perspective should therapy effectiveness be assessed?
2. Which indicators should be used to describe health and treatment outcomes, and how can values be assigned to the different indicators?

Which indicators?

- ◆ Aesthetics?
- ◆ Functional measures?
- ◆ Patient satisfaction?
- ◆ Time?
- ◆ Adverse effects on remaining oral tissues?
- ◆ Longevity?
- ◆ Quality of life?

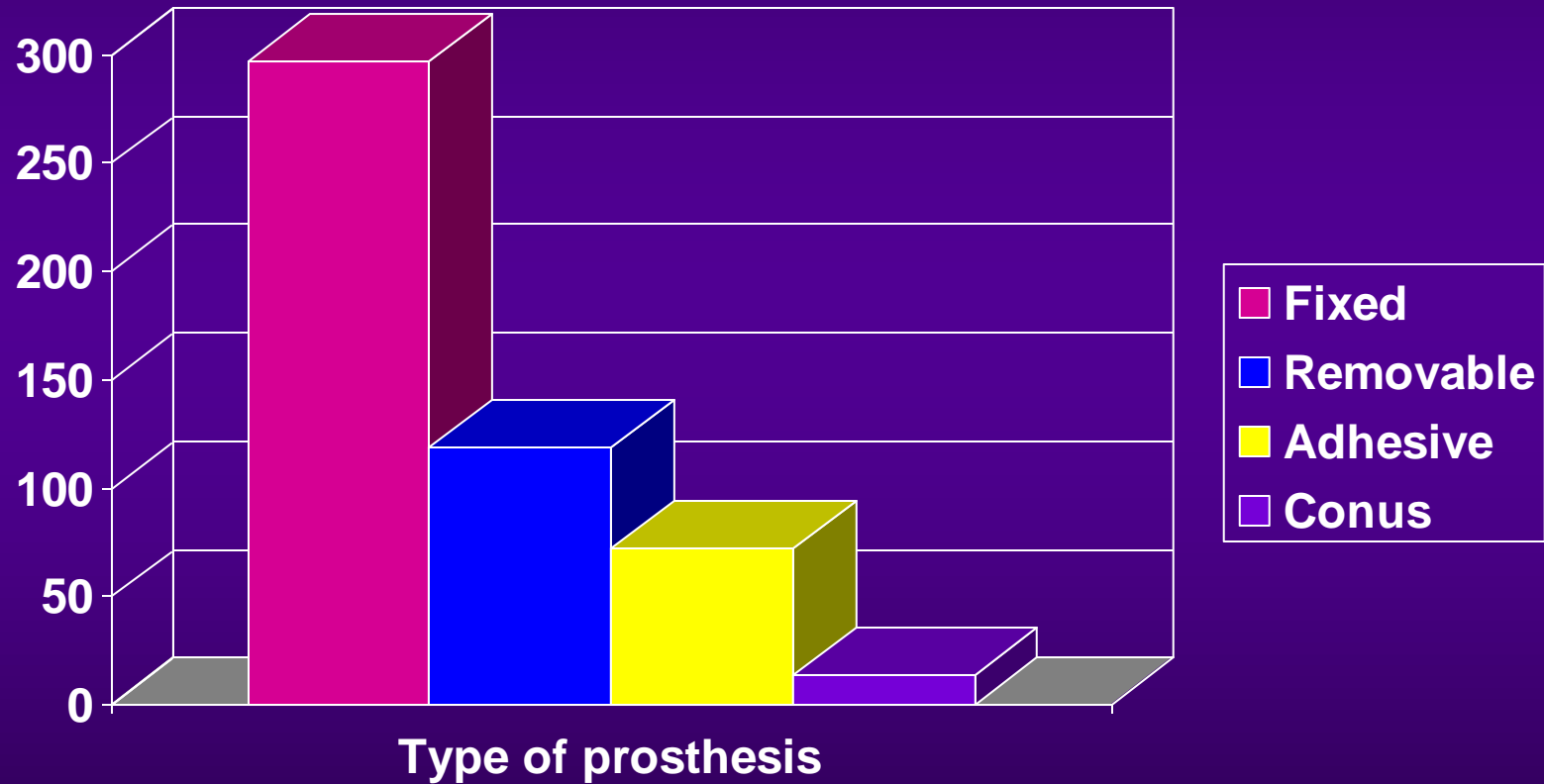


Cost-effectiveness issues

1. From whose perspective should therapy effectiveness be assessed?
2. Which indicators should be used to describe health and treatment outcomes, and how can values be assigned to the different indicators?
3. What is the quality of the data available for appraisal?



Clinical studies, partial tooth loss, (n=490)



Clinical studies - design characteristics

	Number of cohorts			Observation period		Size	
	1	2	>2	span	average	span	average
Prospective (n=52) (n=4)	39	2	3	48 days - 25 years	4.7 years	4 -300	56
Retrospective (n=23) (n=2)	13	1	3	2 - 25 years	7.2 years	24 - 524	120
Case series (n=15) (n=1)	15	-	-	3 mths - 13 years	4.4 years	8- 344	88
RCT (n=10) (n=1)	-	7	3	14 days - 4 years	< 1 year	14-85	43

	Size	
	span	average
Cross-sectional (n=32)(n=6)	13- 1608 24-1286	202 612
Experimental (n=41)(n=0)	1 -79	22
Case-control (n=10)(n=1)	8- 250	95



Costs considerations in prosthetic therapy

- ◆ Fees
- ◆ Survival
- ◆ Yearly expenditures
- ◆ "Worst-case"- scenario

Costs =

Biological - Economical - Psychosocial

Choice of therapy?

Patient information:

- pain region 44-45
- would like a better chewing situation in 4. quadrant



Findings:

- 35: mesially tipped
- 36: caries distally, bifurcation involvement, interference 25/36
- 47: root remains

Upper jaw front: aesthetics





Findings:

42, 41, 31, 32: attachment loss, mobile

44: periapical lesion

45: caries distally, fractured reamer

47: ankylosis

Remove pathology: Clinical questions

- ◆ Caries
Restorative material?
- ◆ Periapices / pulpitis
Retrograde endodontics?
Extractions?
- ◆ Periodontitis
Furcation surgery?
Root separation?
- ◆ Tipping / Interference
Orthodontics?
Occlusal correction?



Remove pathology:





Removal of pain and pathology
can not be seen isolated from
Rehabilitation

What should decide the choice of
further treatment?



Choice of therapy

1. Patient views , choice of values, attitude to risk



Choice of therapy - preferences

- ◆ Total rehabilitation or minimal solution?
- ◆ Demand for longevity e.g. 1 year --- 30 year?
- ◆ Demand for fixed removable prosthetic solutions?
- ◆ Expectance of treatment?
- ◆ Risk attitude to iatrogenic damage, i.e. future prognosis of tooth?
- ◆ Patient economy



Choice of therapy - preferences

Patients differ regarding views and choice of values - i.e. "personality profile"

Håkestam & Söderfeldt: 3 groups:

health - appearance - longevity

Lutz et al. 5 groups: orally:

functional - presentable - healthy -
beautiful - metal-free



Choice of therapy

1. Patient views and choice of values

2. Patient communication

Robin Wright. Tough Questions, Great answers. Chicago: Quintessence, 1997.



Choice of therapy

1. Patient views and choice of values

2. Patient communication

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3. Possible technical solutions



Choice of therapy - possibilities

Possible technical solutions

Material properties



Dentist / technician-knowledge & capabilities



Iatrogenic
damage?
= biologic cost





Patient wish vs realistic treatment possibilities

1. Patient views and choice of values

2. Patient communication

Robin Wright. Tough Questions, Great answers.
Chicago: Quintessence, 1997.

3. Possible technical solutions

4. Realistic aims with different technical solutions?

- ◆ Restore function?
- ◆ Change appearance?
- ◆ Prevent future problems?
- ◆ Level of, or risk for, iatrogenic damage?



Psychosocial
values/costs



Biologic costs



Choice of therapy

1. Patient views and choice of values

2. Patient communication

Robin Wright. Tough Questions, Great answers.
Chicago: Quintessence, 1997.

3. Possible technical solutions

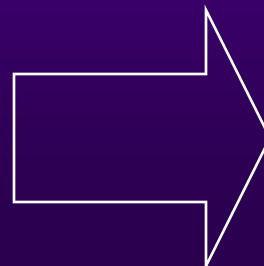
4. Realistic aims with different technical solutions?

5. Alternative technical solutions - costs

Economic

+

Prognosis



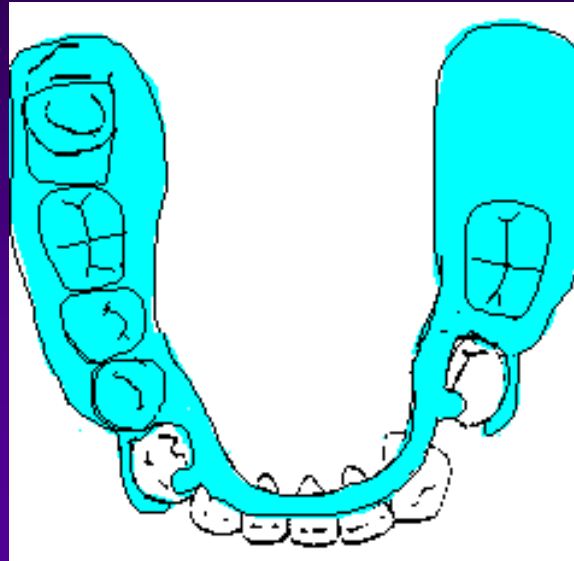
Economic

Psychosocial

Biologic



Acrylic partial denture



Fee: NOK 4.000-6.000

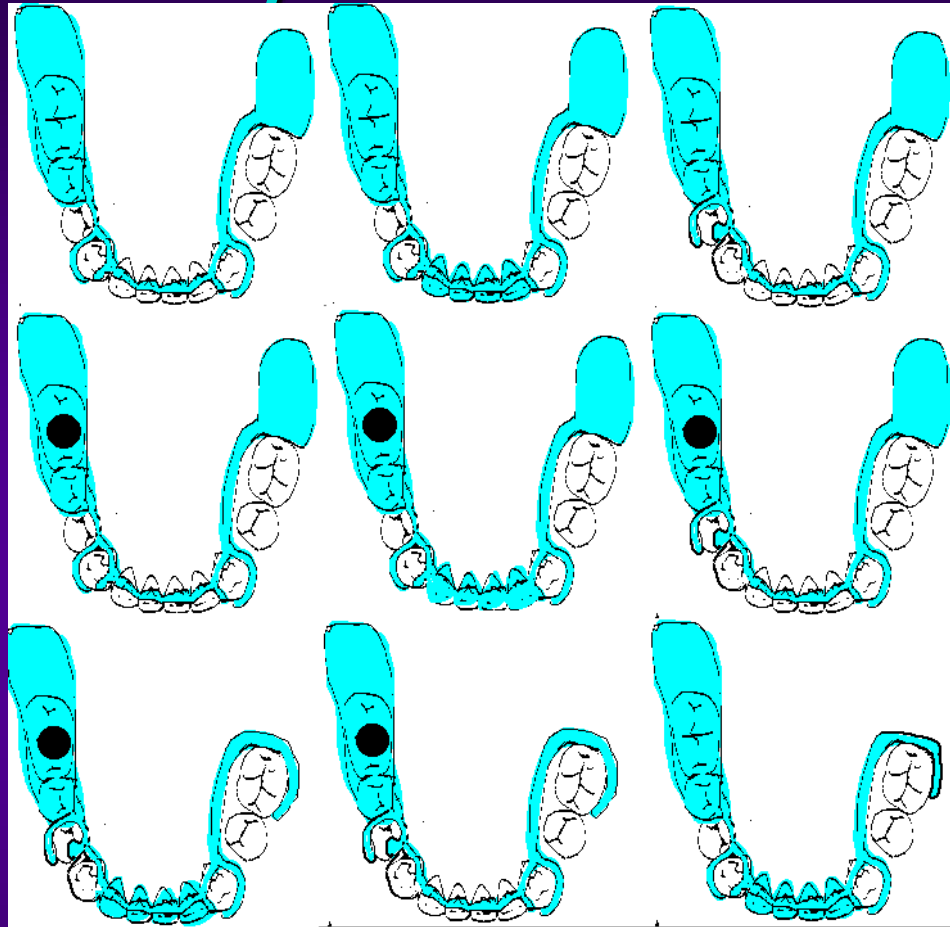
Considerations:

- Dental vs lingual bar?
- Extraction front teeth?
- Extraction 36 mesial root?
- Clasps 33 or 35?
- Extraction 44 and/or 45?
- Extraction 47?





Cast partial denture



Fee: NOK 7.000 - 17.000

Additional Considerations

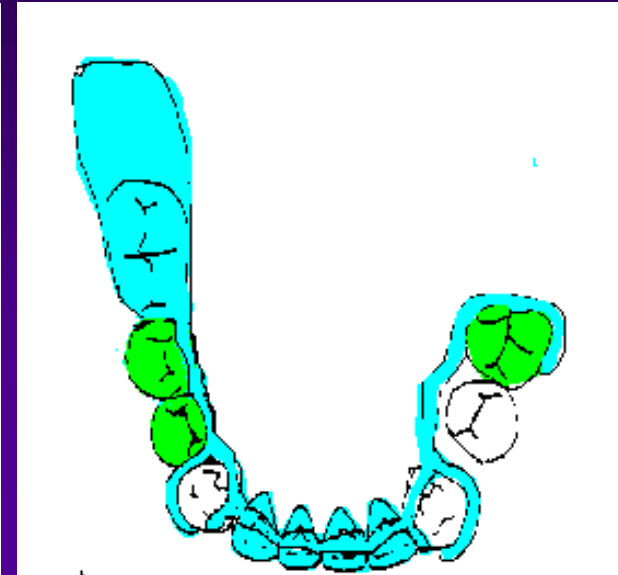
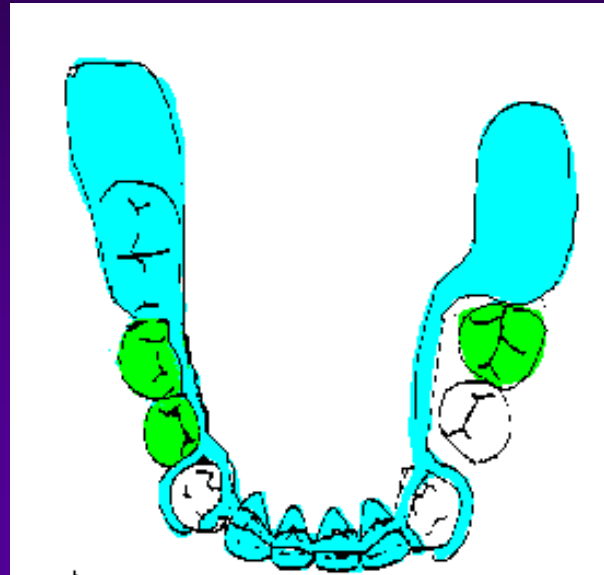
saddle 3. quadrant?

clasp 43 or 44 or 45?

47: attachment-gold coping- extraction?



Cast denture + crowns



Fee: NOK 16.000-26.000

Additional considerations

Soldered 44 and 45?

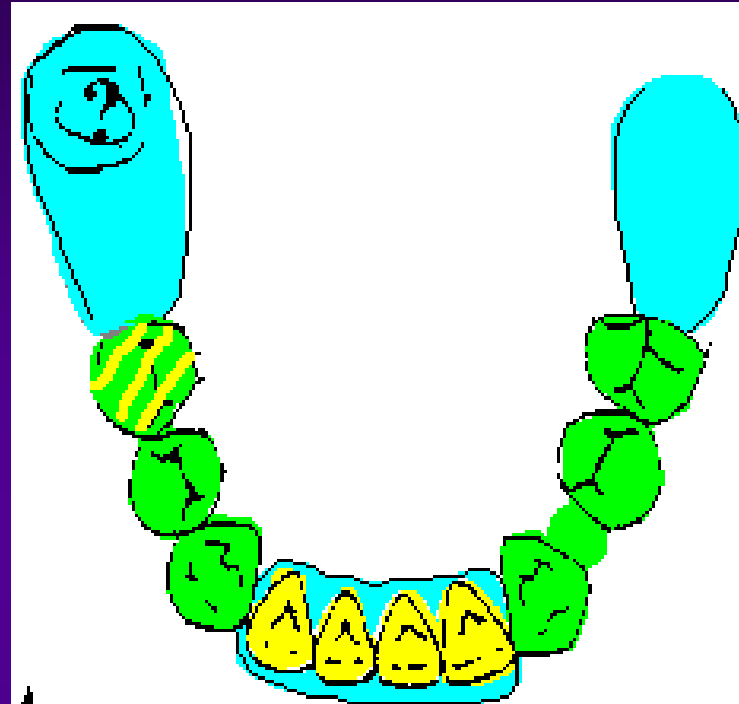
36 extraction or crown?

Milled crowns?

Intra- or extracoronal attachments?



Conus bridge



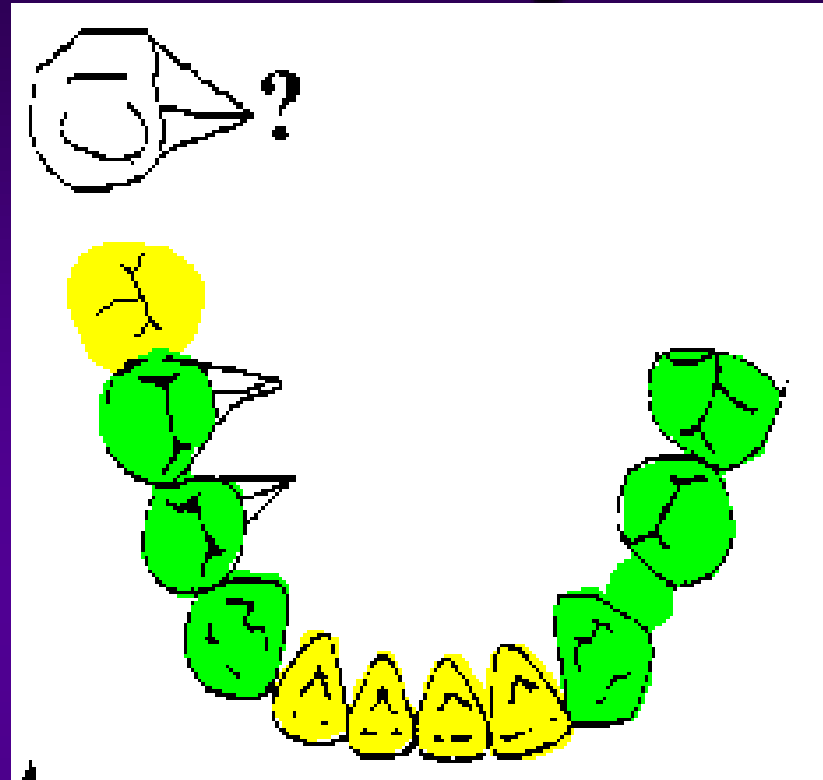
Fee: NOK 30.000-35.000

Considerations:

47, 36, 45: extraction or gold coping or attachment?

43/44/45: separation?

Fixed bridge



Fee: NOK 30.000-35.000

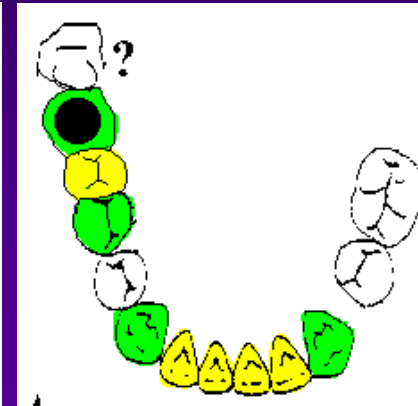
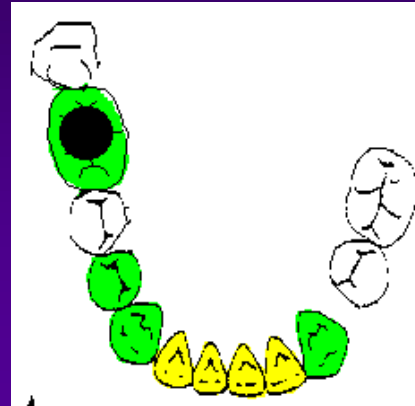
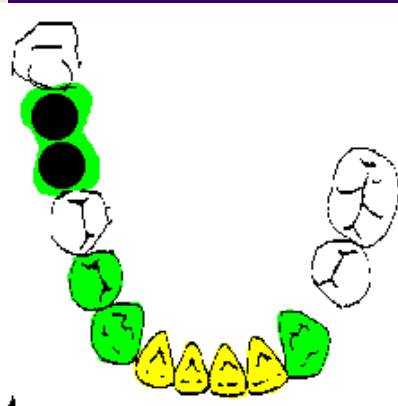
Considerations

Conventional alloy, titan-ceramic or gold acrylic?

Zn-phosphate, GIC or resin cement?

Bridge extention 46? 46+47 ?

Implant retained prosthesis



Fee: NOK 15.000 -30.000 + FPD NOK 15.000

Considerations

One or two fixtures?

Wide collar - standard diameter?

Splintet - non-splintet?

Cement - screw?

Nobelbiocare, Astra, ITI, Friatec, Calcitek, IMZ, Corevent, Sterioss...?



Summary, fee

1 Clasp partial denture	NOK 4 - 6.000
2 Cast partial denture	NOK 7- 17.000
2b " " " + crowns	NOK 16- 26.000
3 Conus bridge	NOK 30- 35.000
4 Fixed partial denture	NOK 30- 35.000
5 Implant based	NOK 30- 45.000



Economic cost over time

◆ Initial fee

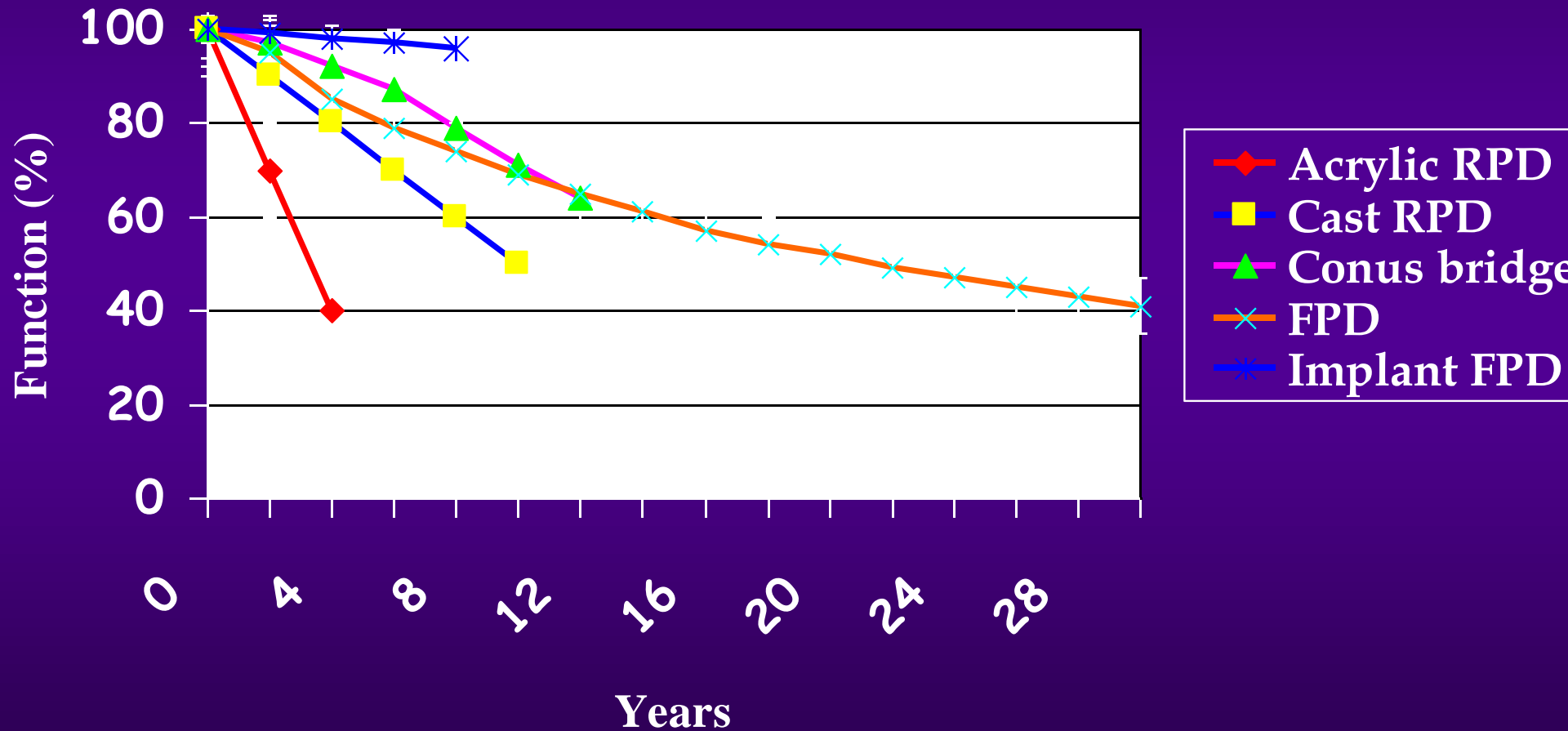
◆ Prognosis

a. Average survival

b. Yearly maintenance in time = costs

$a \times b = \text{economic cost over time}$

Survival, published data



Maintenance (minutes/year)



<u>Type.</u>	<u>Control</u>	<u>Adjustments</u>	<u>Repair</u>	<u>Sum</u>
Acrylic RPD	10	clasp 2.year-10 occlusion 6.year-60	rebase 3.year-60 tech.prob 10%/2y	50
Cast RPD	10	clasp 2.year-10 occlusion 6.year- 60	rebase 6.year-60 tech.prob 8%/2y	40
Conus bridge	10	retention 2.year-10 occlusion 6.year- 60	rebase 6.year-60 endodontic 20%/10y tech.prob 100%/5y	50
FPD	10		endodontic 8%/10y tech.prob. 20%/5y	20
Implant-based	10		tech.prob. 40%/5y	40-70

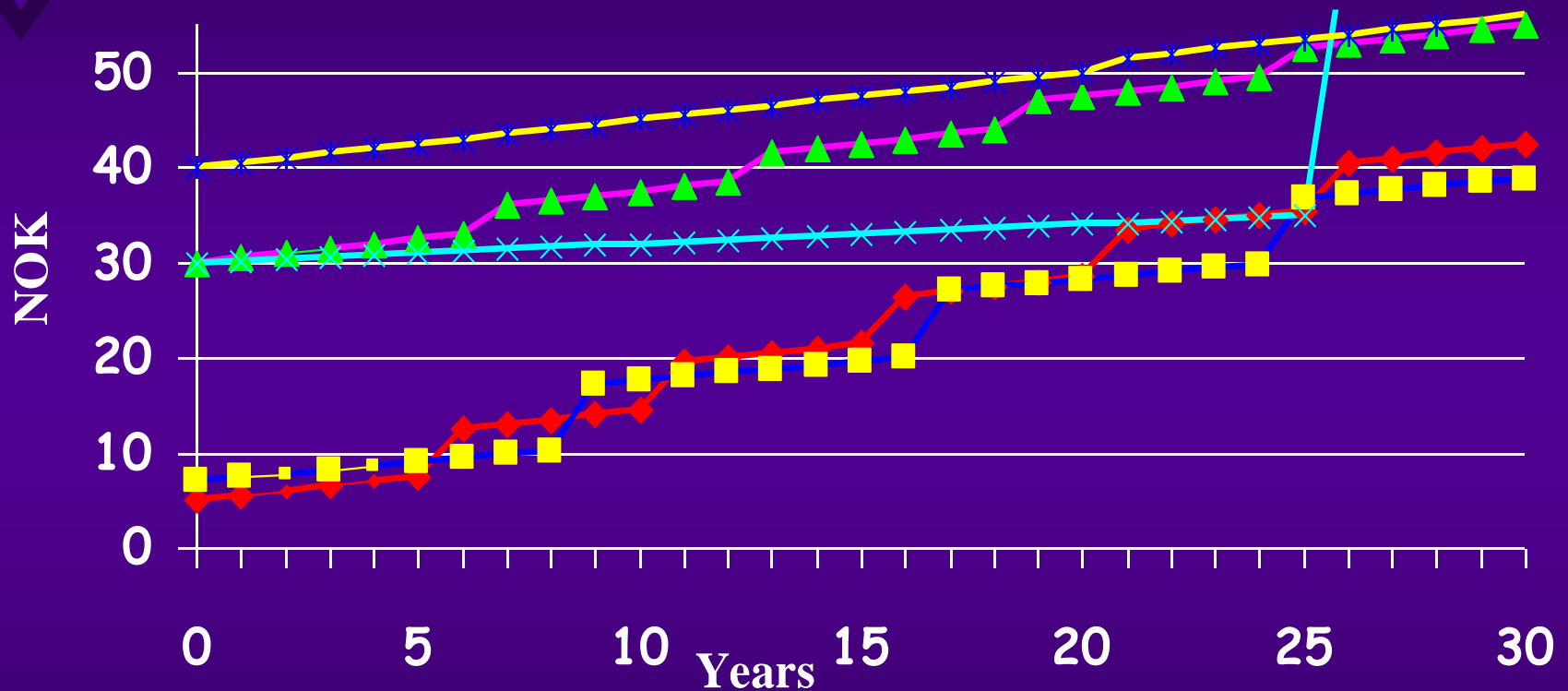


Summary, fee + maintenance

1 clasp part.dent.	NOK 4 - 6.000	50 min
2 cast part.dent.	NOK 7- 17.000	40 min
2b " " " + crowns	NOK 16- 26.000	45 min
3 conus bridge	NOK 30- 35.000	50 min
4 bridge	NOK 30- 35.000	20 min
5 Implant based	NOK 30- 45.000	40-70 min + 18 min



Economic costs over time - theoretical model



Inadequacies of model:

Costs are not adjusted for inflation

Replacement not always possible

Based on average data - not on individual practitioners'



Other potential costs

1. What can happen if and when the prosthesis fail?
- 2 . How probable is it that the prosthesis which I have made will fail?



Potential costs
economic - biologic - psychosocial



"Worst case" situation

i.e. = failure of prosthesis within 1. year in spite of:

- ◆ *Correct indications and clinical procedures*
- ◆ *Esthetically acceptable and technically free of discrepancies at the time of delivery*
- ◆ Probability: *percentage of cases?*
- ◆ Consequence: *usually alternative / new prosthesis*



Economic costs: *remake free of charge common, to keep good patient relationship*

+

biologic & psychosocial costs



Summary - "worst case"

<u>Type:</u>	<u>Problem:</u>	<u>%</u>	<u>Additional cost</u>
Acrylic RPD	maladaptation	<25	5.000 <i>Alt.prosthesis</i>
Cast RPD	maladaptation	<=8	7.500 <i>Alt.prosthesis</i>
Conus bridge	tight retention	0.5	1 hour <i>correction</i>
FPD	abutment fracture	0.5	15-30.000 <i>implant</i>
Implant FPD	"sleeping fixt"	<4	5-30.000 new <i>fixture?</i> <i>New FPD?</i>

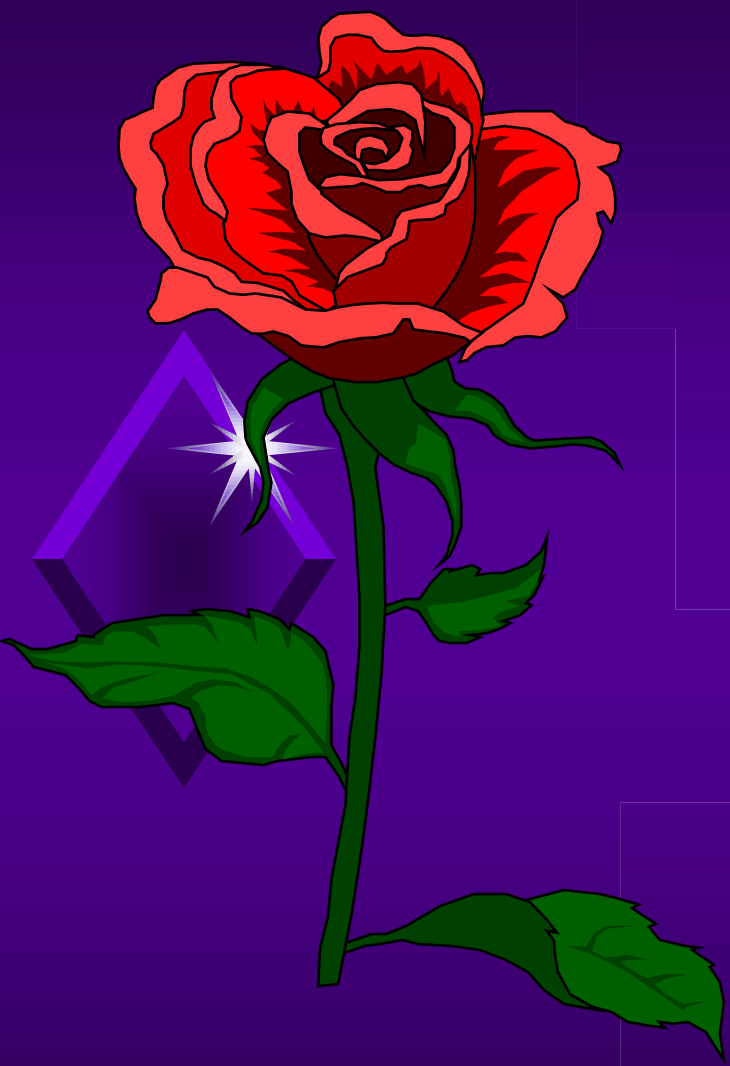
RPD and cost-benefit



Daily application of economic considerations in patient care

Costs=Biological, Economical, Psychosocial

1. Possible technical solutions
2. Patient views and choice of values
 - ◆ Individually aimed treatment planning
3. Realistic aims with different technical solutions
4. Choice of technical solution integrating:
 - ◆ Fees
 - ◆ Survival
 - ◆ Yearly expenditures
 - ◆ "Worst-case"- scenario



*Thank you
for your
kind
attention*