



***„For my patients  
who need  
eXtra care!“***



***A new vision***

For better dentistry

**DENTSPLY**

# New challenges

## New patient profile

- **Demographic changes**
- **Socio-economic changes**
- **Changing nutritional habits**

## Specific treatment challenges

- **Prevention**
- **Nutrition advice**
- **Course of treatment**
- **Special requirements of filling materials\***

\* There is a need for Extra Care. Fluoride releasing and buffering glass fillers are an established and interesting approach...  
Prof. Dr. Michael J. Noack, Quintessenz 2006;57(5):459

# Patients, who need eXtra care



Children



Teenagers

***“20% of all patients account for  
80% of caries treatment!”***

(Drury et al., J Dent Res 1996)



Adults with high risk of caries



Elderly patients

# 01 Children



## ■ Parents with high expectations

- Low compliance
- Isthmus fracture risk
- Oral hygiene
- Nutrition causing caries



## Longevity of occlusally-stressed restorations in posterior primary teeth

Type of restoration	Annual failure rate (%)
Amalgam	0 - 35.3
GIC ART	2 - 29.1
GIC conv.	0 - 25.8
Composite	0 - 15
Steel-Crown	0 - 14
Compomer	0 - 11

Hickel R et al. (2005). Longevity of occlusally-stressed restorations in posterior primary teeth. *Am J Dent* 18:3;198-211.

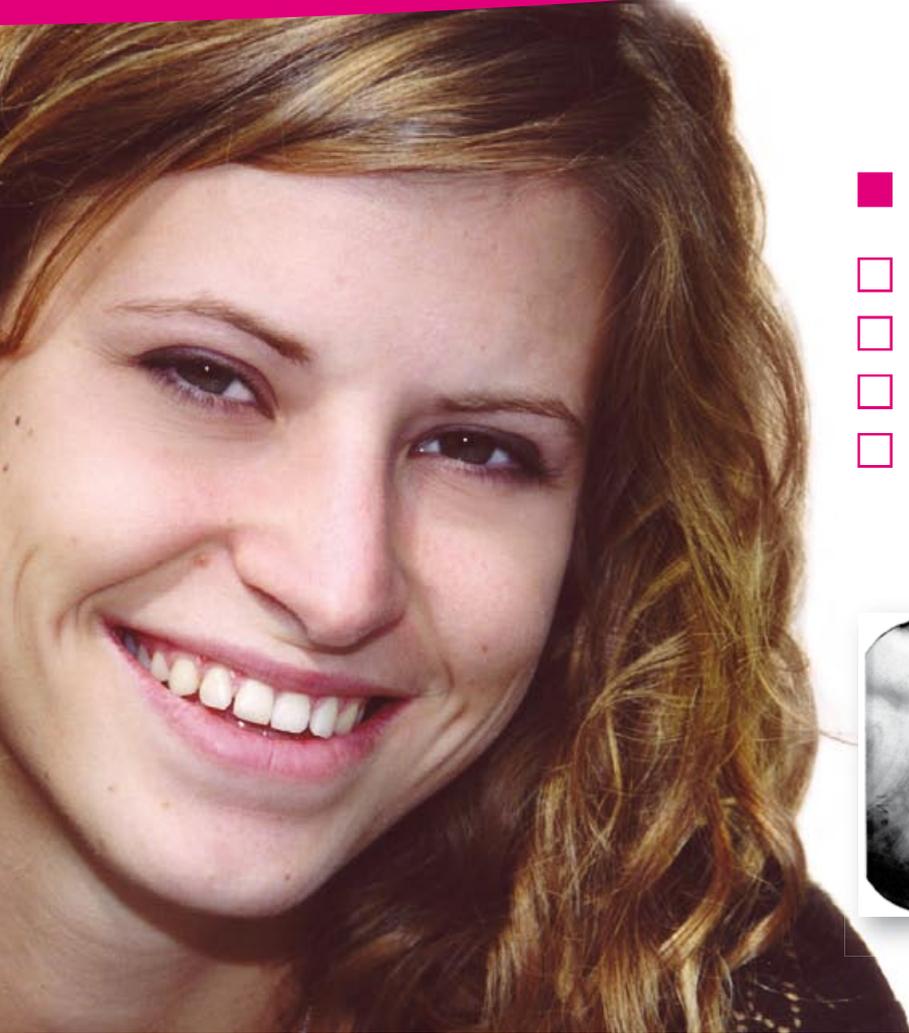
## Prof. Dr. Norbert Krämer

University of Erlangen

"The latest findings indicate that over 50% of 6 year-olds have untreated carious deciduous teeth. The success rate of compomers in treating the primary dentition means that they can be effectively used to considerably improve the standard of oral hygiene in children and for the early treatment of carious lesions."

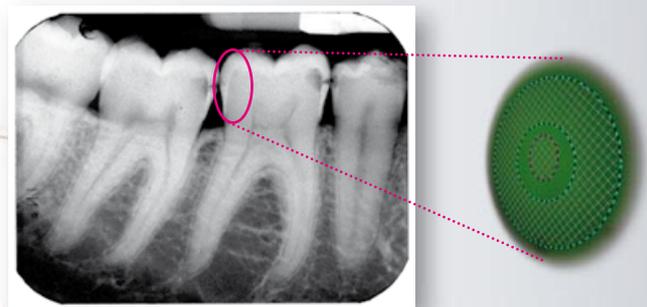
DZW (dental weekly journal, Germany, week 26, 2005)

## 02 Teenagers

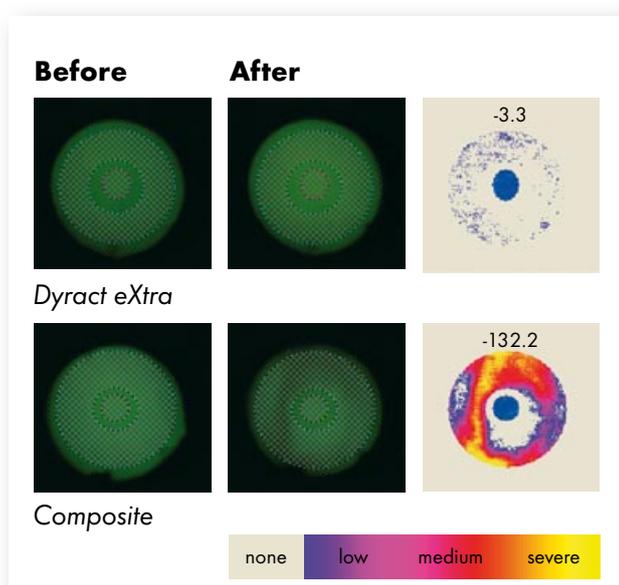


### ■ Multiple primary lesions

- Secondary caries
- Aesthetic requirements
- Oral hygiene
- Nutrition causing caries



### Caries preventing effect for approximal contacts demonstrated



### Prof. Dr. Thomas Attin

University of Zurich

"During the study we observed significantly greater caries formation on opposing surfaces - i.e. on the simulated approximal surfaces of adjacent teeth - with the non-fluoride releasing filling materials than with Dyract® eXtra. (...) The effect we observed was especially prevalent in subjects with higher caries activity. It would be logical therefore if I as a dentist treated high risk caries patients with fillings from fluoride releasing filling materials."

DZW (dental weekly journal, Germany, week 36, 2007)

## 03 Adults with high risk of caries

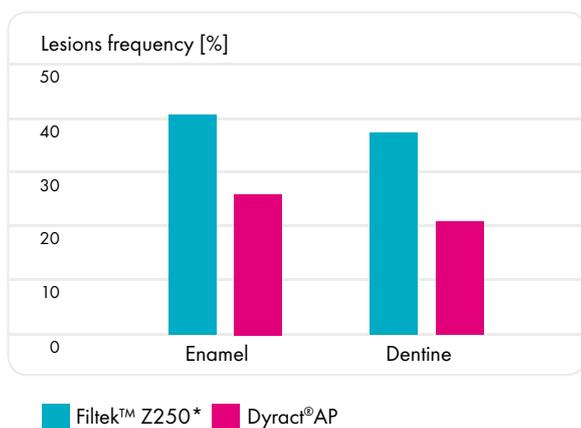


### ■ Multiple lesions

- Secondary caries
- Oral hygiene
- Nutrition causing caries



### Reduction of secondary caries



Hicks J et. al., Compomer materials and secondary caries formations, Am J Dent, 2000

### Prof. Dr. Thomas Attin

University of Zurich

“Dentists have made compomers an established material in their practice: they required a basic filling material that was not silver but still protected against caries to the same extent as glass ionomers and at the same time, was much more stable than these cements.”

DZW (dental weekly journal, Germany, week 24, 2005)

## 04 Elderly patients

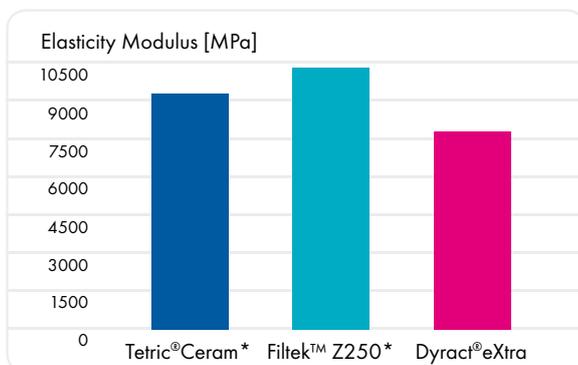


### ■ Cervical lesions

- Secondary caries
- Mouth dryness
- Compromised general health
- Oral hygiene



### Appropriate flexibility due to low E-Modulus



(Data on file)

**Prof. Dr. R. Hickel/PD Dr. Dr. M. Folwaczny**  
*University of Munich*

"For the treatment of carious and non-carious cervical lesions, compomers revealed the best clinical results."

*Operative Dentistry Supplement 6, 2001, 177-190*

	Especially important for ...				Results from ...		
	Children	Teenagers	Adults with high risk of caries	Elderly patients	Glass Ionomers	Composites	Dyract eXtra
Long term Fluoride release + Buffer capacity	✓	✓	✓	✓	+	-	+
Longevity	✓	✓	✓	✓	-	+	+
Aesthetic		✓	✓		-	+	○
Material flexibility due to a low E-Modulus				✓	-	-	+
Xerostomia (Mouth dryness)				✓	-	+	+
Time-saving treatment	✓			✓	+	-	+



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