

Icon proximal
Early arrest of caries.



Wait? Drill? Or...

IT'S JUST GOOD HAVING ANOTHER TREATMENT OPTION.

Take a glance through your patient records. How many classic »let's keep an eye on this« cases are there? But, ultimately, sitting around and waiting is no good for anybody, especially when you end up drilling anyway. Caries infiltration with Icon broadens your treatment options.

MODERN DENTISTRY IS FOCUSED ON PREVENTION NOW MORE THAN EVER.

In early stages, caries can be treated with fluoride. As the caries progress deeper, however, a filling becomes necessary. Even minimally invasive treatment in proximal areas requires sacrificing lots of healthy tooth structure to reach the infected lesion. Caries infiltration with Icon builds a bridge between prevention and minimally invasive therapy methods. Infiltration with the highly fluid resin enables an innovative treatment of incipient proximal caries as well as smooth surface white spots.

**NO DRILLING, NO PAIN, NO UNNECESSARY
DAMAGE OF HEALTHY TOOTH STRUCTURE.**

Challenges in the practice.

AREAS BETWEEN TEETH ARE AT RISK BUT DIFFICULT TO ACCESS.

Proximal areas are not only a problem when brushing. Caries can form here quite easily, which are difficult not only to detect, but also for the dentist to reach physically.

Can this problem be solved?

It can. You can.



Invasive treatment leads to a large loss of healthy tooth structure. Particularly in cases of proximal caries, there is an unfavorable ratio of healthy tooth to caries that must be removed.

Icon: The answer.

Caries infiltration with Icon fills the gap between prophylaxis and filling. In addition, this treatment optically blends in the lesion with the healthy enamel. This innovative method can therefore be used for esthetic treatments of front teeth, where appearance plays an important role.

AN INGENUOUSLY SIMPLE PRINCIPLE

The infiltration method works quite simply: After pre-treatment with an etching gel, the infiltrant, a highly fluid resin, is applied to the affected area.

Capillary action draws the infiltrant deep into the porous enamel, and it is then light-cured. This blocks the penetration of cariogenic acids. The incipient caries can be stopped – without drilling.

Healthy tooth structure is preserved.

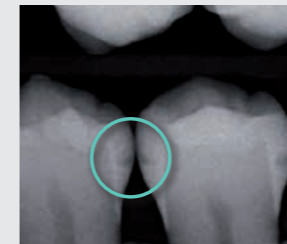
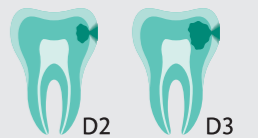
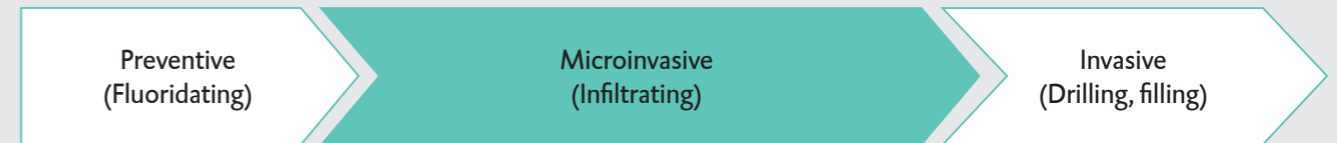


Incipient caries before treatment: Cariogenic acids attack the enamel and draw out minerals. The tooth becomes porous.

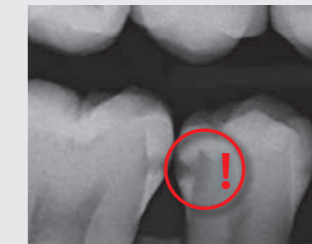


After treatment: By sealing the pore system, acids can no longer penetrate into the lesion, thus stopping the progression of the caries at an early stage.

Icon fills the gap between fluoridating and filling.



Icon can be used to effectively arrest the progress of caries that x-rays show have not advanced farther than the outer third of the dentine (E1-D1).



If x-rays show the lesion has advanced past the outer third of the dentine, treatment with Icon is no longer indicated. In this case, traditional invasive therapy is required.

THIS METHOD IS SO COMPELLING, THAT MY ONLY QUESTION IS: WHY WASN'T THIS BEING DONE SOONER?

What sounds so simple was actually long hard work in research and development at the Charité Berlin, Kiel University (CAU), as well as at DMG.

Many years and countless tests and studies were necessary before it was certain: Icon works.



The infiltration treatment consists of 3 easy steps:

ETCHING – DRYING – INFILTRATING

All the materials required are contained in every Icon package.

1. ICON-ETCH

Icon-Etch prepares the tooth for infiltration. The HCl-Gel is applied to the affected area with the aid of our special applicator tip, removing the pseudo-intact surface layer. Only when this layer has been removed can the infiltrant penetrate into the pore system of the tooth.

2. ICON-DRY

For the next step of the infiltration process, a dry environment is necessary. To this end, the lesion is dried with Icon-Dry (ethanol) and air.

3. ICON-INFILTRANT

The low viscosity infiltrant is applied, and penetrates deep into the enamel through capillary action and it is then light-cured. The infiltrated lesion has similar mechanical and visual properties to healthy enamel.



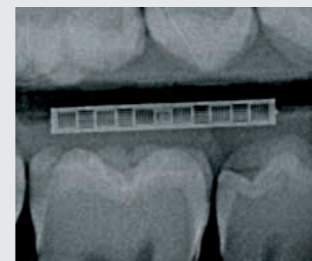
How-to film on
DMG's youtube channel

www.youtube.com/dmgdentalEN

ICON BETWEEN TEETH



Initial clinical situation.



Bitewing X-ray.



Separation with dental wedge.



Etching.



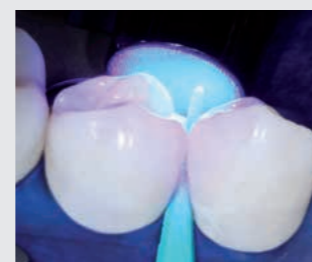
Drying.



Infiltrating.



Removal of excess.



Light-curing.

Tips from the practice:

EXACT DIAGNOSIS WITH BITEWING X-RAYS

- > Make use of bitewing x-rays for early diagnosis of proximal lesions.
- > Check the necessity of x-ray images in advance, for example through the use of fiber-optic transillumination devices.
- > A helpful accessory for these x-rays is the DMG Icon X-ray Holder System. It makes it possible to take multiple images in the same reproducible position, even over several sessions, and therefore simplifies the diagnosis and evaluation of the therapy's success.

DOCUMENTATION IN PATIENT RECORDS

- > Icon is not radiopaque.
- > This is because certain filler materials are necessary to make it radiopaque. These materials negatively affect the infiltrant's flow properties and therefore its penetrative ability.
- > In order to document the procedure properly, the patient card included in every package should be marked and filed appropriately.

GENTLE TOOTH SEPARATION STEP BY STEP

- > It is best to proceed slowly with the tooth separation, a bit like stretching out a muscle. The tissue has to respond to the increase in pressure.
- > Insert the wedge between the teeth until you feel resistance. Hold the wedge in position for several seconds. Softly push the wedge further until the widest part of the wedge creates enough separation between the teeth.
- > Alternatively, orthodontic rubber rings (separating rubber) can also be used for separation. These should be placed 1 hour to 1 day before the infiltration treatment.

LOCAL DRYING

- > Sufficient drying is very easy to achieve within seconds with the DMG MiniDam.
- > The silicone protection can be quickly applied by just one person and stabilizes itself – without clamps.

IT'S LIKE WITH ANYTHING: THE MORE OFTEN YOU DO IT, THE MORE ROUTINE IT BECOMES.

Even though minimally invasive infiltration is a relatively new form of treatment, the individual treatment steps – etching, drying, filling, and light-curing – all follow the familiar pattern of traditional methods. Infiltration will quickly become an important element in your practice portfolio. See for yourself.



General recognition.

AWARD-WINNING

Among other awards, DMG received the »Deutschen Innovationspreis 2010« in the category »Mittelständische Unternehmen« for Icon. DMG was also recognized as a »Ausgewählter Ort 2009« by the initiative »Deutschland – Land der Ideen« (under the patronage of the Federal President of Germany). Icon was also awarded the »Innovationspreis 2009« by German dentists.



POSITIVE PRESS

Treating initial caries gently, pain-free, and esthetically? Unsurprisingly, there has also been tremendous public interest. The response to caries infiltration in the public media, as well as trade press, has been overwhelmingly positive.

CONVINCING STUDIES

For years, numerous international scientific studies have examined the clinical effectiveness of caries infiltration.

For more information on these studies and current results, see next page and visit our website at www.dmg-dental.com/icon

PRACTICE TESTED, DENTIST APPROVED

How do international dentists rate caries infiltration and their experiences in practice?

Here are a few opinions:

»As a minimally invasive procedure, it is very innovative and very pleasant for the patient.«

Dr. med. Gabriele Blatt, dentist, at br-online.de

» Advantage: Healthy tooth structure is hardly damaged, everything stays nice and white.«

Grazia, Magazine for fashion, lifestyle and beauty

»For us dentists, Icon is the missing piece in the puzzle between prevention and restoration. What I especially like is how scientifically well-documented the method was before it was brought to market.«

Dr. Marcio Garcia dos Santos MSc, PhD (Dentist), Brazil

»The benefits Icon offer me personally are to be able to play an active and preventive role in dentistry!«

Dr. Hervé Tassery (Professor and Hospital Practitioner – University of the Mediterranean Marseille), France

»I have been using Icon for over three years. As a Pediatric Dentist, Icon's non-surgical restorations have really proved extremely successful in treatment of white spot carious lesions. Icon is definitely my choice for preventive dentistry.«

Dr. Richard Chaet (Pediatric Dentist), USA

A focus on caries infiltration in international studies.

NUMEROUS IN-VITRO AND IN-VIVO STUDIES CONFIRM: INFILTRATION CAN ARREST THE PROGRESSION OF CARIOUS LESIONS AT AN EARLY STAGE. ALONGSIDE THE FUNDAMENTAL EFFECTIVENESS, MANY OTHER DETAILED ASPECTS OF THE PROCEDURE HAVE BEEN RESEARCHED. HERE IS A SELECTION OF SOME OF THE ESPECIALLY INTERESTING RESULTS:

Icon works on primary teeth as well.

Ekstrand et al. demonstrated the effectiveness of caries infiltration in a randomized, controlled, split-mouth study on children.¹

Sources

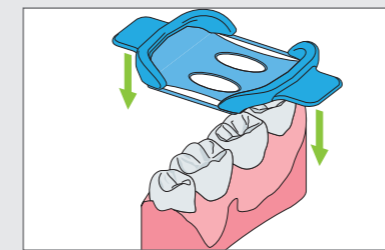
¹ Ekstrand KR, Bakhshandeh A, Martignon S (2010); Treatment of proximal superficial caries lesions on primary molar teeth with resin infiltration and fluoride varnish versus fluoride varnish only: efficacy after 1 year; Caries Res 44(1):41-46

² Dorri, M., et al. (2015). Micro-invasive interventions for managing proximal dental decay in primary and permanent teeth. Cochrane Database Syst Rev 11: CD010431

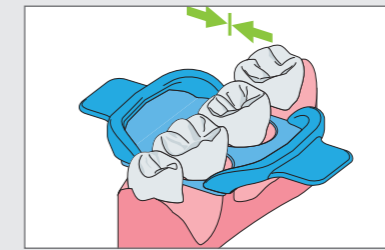
The caries infiltration also stands up to critical examination.

The independent international Cochrane Collaboration has analyzed different micro-invasive treatment methods for proximal caries lesions according to strictly evidence-based criteria. The authors summarily describe caries infiltration as a suitable minimally invasive treatment option.²

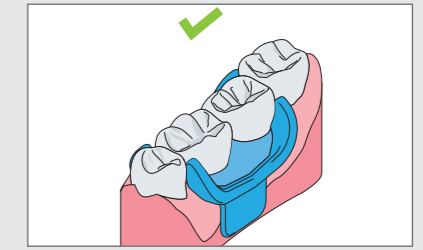
Quick Protection – Where it's needed: DMG MiniDam.



Stretch the DMG MiniDam and pull towards the gingiva.



Release the DMG MiniDam and fold cervically.



The DMG MiniDam stays in place securely without clamps.

LOCAL PROTECTION AND DRYNESS.

The DMG MiniDam protects the proximal region during treatment – quickly, easily and comfortably for the patient. The practical silicone auxiliary ensures that the site being treated is sufficiently dry. At the same time, the gingiva is protected from the materials being used, e.g. etching gel.

SECURE QUICKER.

The DMG MiniDam can be placed by one person in just a few seconds and stabilizes itself – without clamps. That makes it extremely convenient for the dentist and very comfortable for the patient. The material is latex-free and thus harmless for allergy sufferers. Thanks to the DMG MiniDam, procedures in the proximal area, which also include caries infiltration for example, can thus be completed more quickly.



CHILDREN ARE EXCITED BECAUSE WE CAN TREAT WITH ICON BEFORE A CAVITY FORMS.

Clinically proven¹: Caries infiltration is also suitable for primary teeth. And the young patients are especially thankful that the drill stays switched off.

Sources

¹ Ekstrand KR, Bakhshandeh A, Martignon S (2010); Treatment of proximal superficial caries lesions on primary molar teeth with resin infiltration and fluoride varnish versus fluoride varnish only: efficacy after 1 year; Caries Res 44(1):41-46



GOOD REASONS

- Esthetic results on smooth surfaces
- Caries arrest at an early stage
- Preservation of healthy tooth structure
- Pain-free method, without anesthesia, or drilling

Treatable lesions per sales unit		
Sales unit	Starter Pack	Economy Pack
Treatment units	2	7
Treatable lesions	4	14



PRODUCT OVERVIEW

Icon proximal	1 sales unit contains:	1 Syringe @ 0.3 ml Icon-Etch, 1 Syringe @ 0.45 ml Icon-Dry 1 Syringe @ 0.45 ml Icon-Infiltrant, 6 Approximal-Tips, 1 Luer-Lock-Tip, 4 Dental wedges	
	Starter Pack:	2 Treatment units	REF 220341
	Economy Pack:	7 Treatment units	REF 220237
Icon X-ray Holder	Starter Pack:	2 Sighting rings, 2 Icon X-ray Holder size 1 (3 x 4), 10 bite plates size 1 2 Icon X-ray Holder size 2 (2 x 3,5), 10 bite plates size 2	REF 220508
	Package:	2 Icon X-ray Holder size 1, 20 bite plates size 1 2 Icon X-ray Holder size 2, 20 bite plates size 2	REF 220509 REF 220510
DMG MiniDam	Package:	20 Pieces	REF 220509