PerioChip®

2.5 mg dental insert [chlorhexidine digluconate]

Make your RSD more effective

Would you like to introduce **PerioChip®** into your practice?
Call **0800 013 2333**, visit **www.periochip.com** or email **team@periochip.co.uk** to arrange a free Educational Visit.

For medical staff only







Make your RSD more effective







Offering choice



The importance of offering choice to your patients is significantly increasing.

In its 2016 "The Good Practitioner's Guide to Periodontology",

The British Society of Periodontology advises that: 'options for care and their benefits, costs and risks should be discussed (with patients) and documented.'

(BSP, 2016. The Good Practitioner's Guide to Periodontology. London: British Society of Periodontology)

In its 2012 report, the BDA identified that:

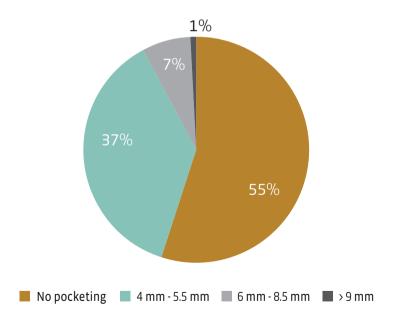
'a quarter of patients felt that they have not been involved in decisions about their treatment.'

(BDA, 2012. Public perceptions of choice in UK dental care: finding from a national survey. London: British Dental Association)

Periodontal disease in the UK

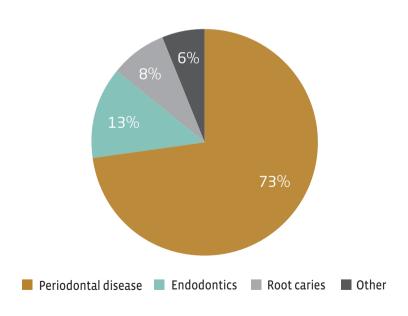
% of patients with at least one periodontal pocket 1

- > Periodontal Disease is on the rise
- > Pocket Depth $\ge 4 \text{ mm} = 45\%^3$
- > 50/50 localised vs. generalised



Reason for tooth loss²

73% of tooth loss in the UK is due to Periodontal Disease



1. NHS, 2011. Adult Dental Health Survey, 2009. London: NHS Digital. 2. Ravald, N., Johansson, C. S., 2012. Tooth loss in periodontally treated patients. A long-term study of periodontal disease and root caries. J Clin Periodontol, 39(1):73-9. 3. PerioChip® is indicated for use on pockets with a minimum depth of 5mm (PerioChip SmPC).

What is PerioChip®?







PerioChip®

is an innovative, easy to insert biodegradable chip containing 2.5 mg of chlorhexidine digluconate (CHX), making it an effective non-antibiotic adjunct treatment to be used alongside RSD* in the treatment of adult periodontitis.

PerioChip®

makes RSD more effective by killing 99% of periopathogenic bacteria in the pocket, suppressing bacterial growth for up to 11 weeks, therefore promoting clinical reattachment. 4

It can also be used as a part of a periodontal maintenance program, which includes good oral hygiene and RSD.

- Localised and sustained release of chlorhexidine digluconate
- Suppresses growth of bacteria in subgingival plaque⁴
- > Minimal patient compliance needed
- > Easy insertion
- > Biodegrades after placement
- > Locally active within the crevicular fluid
- > Non-antibiotic
- > Well established positive safety profile

^{*} RSD - Root Surface Debridement

^{4.} Soskolne, W. A., et al. (1998). An in vivo study of Chlorhexidine release profile of the PerioChip in the gingival crevicular fluid, plasma and urine. J Clin Perio, 1998(25): 1017-21.

PerioChip®

Clinical benefits

- Reduces tooth loss
- Kills 99% of periopathogenic bacteria⁴
- Suppresses bacterial flora for up to 11 weeks
- No bacterial resistance
- Makes RSD more effective
- · Reduces risk associated with PD

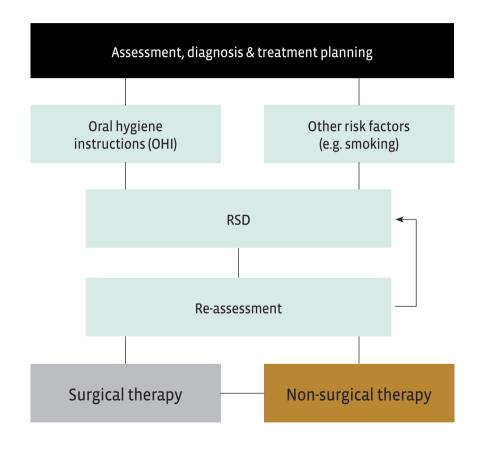
PerioChip®

Non-clinical benefits

- Offers patient choice
- Increases in-house referrals
- Upskills clinicians
- Increases private revenue
- Increases patient retention
- · Reduces risk (health & legal)

^{4.} Soskolne, W. A., et al. (1998). An in vivo study of Chlorhexidine release profile of the PerioChip in the gingival crevicular fluid, plasma and urine. J Clin Perio, 1998(25): 1017-21.

Periodontal assessment and treatment options⁵



Adjunct	PerioChip [®]	Antibiotic	Gel
Frequency of application	Every 3 months	Every 10 days for 6 weeks	Every 3 months
Active ingredient	СНХ	Tetracycline based	СНХ
Suppresses bacterial flora for	11 weeks	1 day	15 days
Localised	√	√	✓
Sustained	1	X	X
No risk of bacterial resistance	1	X	✓

^{5.} BSP, 2016. The Good Practitioner's Guide to Periodontology. London: British Society of Periodontology.

Antimicrobial resistance



"Antimicrobial resistance threatens the very core of modern medicine and the sustainability of an effective, global public health response to the enduring threat from infectious diseases. It is a crisis that must be managed with the utmost urgency. As the world enters the ambitious new era of sustainable development, we cannot allow hard-won gains for health to be eroded by the failure of our mainstay medicines"

(World Health Organisation, 2015. Global action plan on antimicrobial resistance. Geneva: World Health Organisation)





"There are few public health issues of greater importance than antimicrobial resistance (AMR) in terms of impact on society. This problem is not restricted to the UK. It concerns the entire world and requires action at local, national and global level.

Health professionals must work more closely with their patients, before deciding if an antibiotic is really needed and, in the event that it is, which one is most appropriate."

(Department of Health, 2013. UK 5 Year Antimicrobial Resistance Strategy 2013 to 2018. London: Department of Health)

PerioChip[®]

has no risk of antimicrobial resistance due to its mode of action

How to apply?

01

Remove the foil packet from the box and peel back the foil to reveal one **PerioChip®** (chlorhexidine digluconate 2.5mg) dental insert 02

Using tweezers, grasp the **PerioChip®** at the flat end. Insert the **PerioChip®**, curved end first, into the periodontal pocket subgingivally

03

Press the **PerioChip**® apically to the base of the pocket

04

After insertion, the **PerioChip®** should rest subgingivally at the base of the pocket

03

01



02

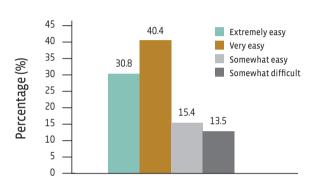




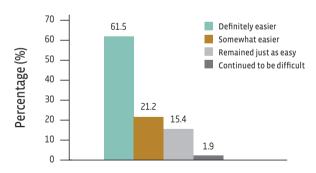
04

Easy application⁶

How easy was the placement of PerioChip®?



Was the chip easier to place over time?



6. McNeill et al, 1998. The Time and Ease of Placement of the Chlorhexidine Chip Local Delivery System. Compendium, 19(11): 1164-5.

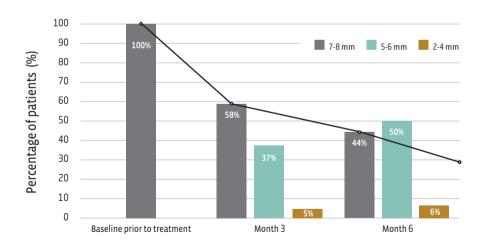
Results

> The **safety and efficacy of PerioChip**® has been proven in a number of clinical studies.

Soskolne et al. evaluated and compared the treatment outcomes for RSD* alone versus the combined use of RSD and **PerioChip**® by undertaking a randomised, blinded, multi-site study (**Number of patients:** 118, **Baseline pocket depth:** 2 7mm): 7

RSD alone⁷

> **After 6 Months:** 56% of pockets were reduced to 6mm or less. This includes 6% of pockets which were reduced to 4mm or less.

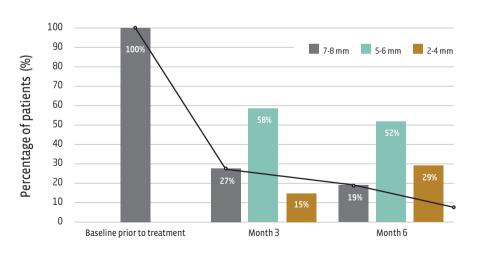


^{*} **RSD** - Root Surface Debridement

7. Soskolne, W. A. et al, 1997. Sustained Local Delivery of Chlorhexidine in the Treatment of Periodontitis: A Multi-Centre Study. J Periodontol, 61(1): 32-8.

RSD + PerioChip® 7

> **After 6 Months:** 81% of pockets were reduced to 6 mm or less. This includes 29% of pockets which were reduced to 4 mm or less.



PerioChip° is significantly more effective than RSD alone

Discussing with your patient



Following assessment and diagnosis, the initial phase should be OHI followed by at least one round of RSD.

At the reassessment visit, you may discuss with your patient and decide to further treat or maintain any pockets which are greater than 5mm with **PerioChip**®.

- PerioChip® is a medium to long-term treatment plan
- PerioChip® can be used as an ongoing maintenance plan
- Set expectations with your patient
- Work together to achieve the best result
- · Provide oral hygiene instructions at every visit
- Discuss other systemic factors which may affect results - such as smoking and other pre-disposing health factors

PerioChip® potential results

application application application ' maintenance (baseline) 1. Check if PD* 1. Check if PD 1. Check if PD 1. Check if PD is ≥ 5 mm is ≥ 5 mm is ≥ 5 mm is ≥ 5 mm 2. RSD** 2. RSD** 2. RSD** 2. RSD 3. PerioChip® 3. PerioChip® 3. PerioChip® 3. PerioChip®



For more information about results please go to page 8 or see clinical studies referenced below and available at www.periochip.com/articles

^{*}PD - Pocket Depth **RSD - Clinical Preference

^{7.} Soskolne, W. A. et al, 1997. Sustained Local Delivery of Chlorhexidine in the Treatment of Periodontitis: A Multi-Centre Study.
J Periodontol, 61(1): 32-8.
8. Soskolne, W. A., Proskin, H. M., and Stabholz, A. 2003. Probing depth changes following 2 years of periodontal management therapy including adjunctive controlled release of Chlorhexidine. J Periodontol, 74(4): 421-7.

Reduce Risk

£2.8 million was paid out in dental claims and a further £2.8 million in legal fees*.

76% of all claims are either due to periodontitis or are periodontal-related*

Average claim £31,000*

Highest claim £170,000*

GDC may also investigate*

Claims are on the rise*

*Dental Defence Union. 2014. DDU pays out £2.8 million to compensate patients with gum disease. [online] Available at: https://www.theddu.com/press-centre/press-releases/ddu-pays-out-2-million-to-compensate-patients-with-gum-disease [Accessed 1 July 2017].

Failure to diagnose and treat Periodontal Disease is a common and rapidly increasing source of complaints, claims and regulatory challenges for the dental team. Record keeping should be designed to facilitate patient management and will assist Clinicians with becoming more compliant with regulatory and dentolegal standards.

As more medical conditions become associated with Periodontal Disease, the effects of the infection from the highly toxic bacteria lodged underneath the gums echo throughout our bodies and can cause or contribute significantly to other illnesses. Reduce your patients' risks by diagnosing and treating Periodontal Disease effectively.



Diabetes



Heart Disease



Cancer



Respiratory Disease



Premature Birth Risk



Osteoporosis



Stroke

TESTIMONIALS

What professionals say about PerioChip®

Charlotte Curran RDT, RDH

"The reduction in pocket depth after just one application is fantastic, which is difficult to achieve with root surface debridement alone."

"I would strongly recommend PerioChip to other practitioners because it really helps with stubborn pockets and has become a staple in my armoury against periodontal disease."

Kathryn Carey RDT, RDH

"Going back to the first time
I ever used it, besides the fact
that it works exactly as promised
– in that it does indeed reduce
pocket depth when used with
scaling and root planing - there
was a surprising side effect
in my patients. And that was,
having opted for *PerioChip*, they
seemed to make even more effort
between appointments to keep
their dentition and gingiva clean."

Case study

Dr Amit PatelSpecialist in Periodontics and implants



Case #1

A 45 year old, non-smoking male presented with pus draining from his lower right premolar tooth. He also complained of food trapping between teeth

After a full consultation, a diagnosis of generalised moderate to severe chronic periodontitis was made. It was also noted that the LR5 had severe bone loss with an intra-bony defect and the tooth was vital to Endofrost.

The patient underwent a course of initial therapy, which included oral hygiene instruction. The use of large interdental brushes and a circular oscillating electric tooth brush was recommended. Root surface debridement then commenced using local anaesthetic

At the three month periodontal reassessment appointment all the periodontal pockets had healed apart from the LR5 distal pocket, which was 7 mm deep. Periodontal regeneration surgery was discussed but patient expressed a preference for non-surgical therapy.

After performing subgingival plaque removal of the site, a PerioChip® was placed into the pocket as an adjunct to suppress bacterial flora. As part of the post treatment instructions the patient was asked to avoid using larger interdental brushes for two weeks before carrying on with his improved routine.

Another periodontal review took place three months later, which showed significant improvement; the periodontal pocket reduced to 3 mm.

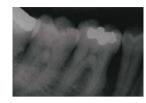


Figure 1: Severe bone loss noted LR5 distal aspect



Figure 2: Initial probing depth of 10 mm



Figure 3: Probing depth after utilising PerioChip® – three months post placement showing a reduction in pocket depth to 3 mm

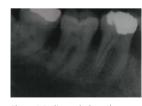


Figure 4: Radiograph shows bony healing six months after non-surgical therapy and PerioChip® placement

Case #2

In another case, a 55 year old, nonsmoking female was diagnosed with localised moderate to severe chronic periodontitis. After full consultation a periodontal pocket of 6 mm was observed to the upper lateral tooth.

The patient underwent a course of initial therapy, which included oral hygiene instructions, with techniques to improve her dental health routine. Treatment options were discussed and the patient opted for a non-surgical, more conservative solution.

RSD using local anaesthetic was carried out to stabilise the periodontal disease. After subgingival plaque removal from the site, a PerioChip® was then placed into the periodontal pocket.

At the first periodontal review three months later, the pocket had reduced to 3 mm

Both patients have now been placed on a bespoke perio-maintenance programme. The patients are called for three-four monthly visits with the hygienist for subgingival plaque removal of any deep sites and placement of PerioChip® if necessary. To implement an effective lifetime regime, oral hygiene education is reinforced at every visit so that patients remain motivated to clean thoroughly and to preserve not only their teeth but also their health and wellbeing.



Figure 5: Severe bone loss noted on the UR?



Figure 6: Placement of PerioChip® in the UR2 periodontal pocket



Figure 7: Radiograph shows bony healing 12 months post non-surgical therapy and PerioChip® placement



Figure 8: Three months post placement of PerioChip® – showing Periodontal pocket reduction to 3 mm

PerioChip®

Abbreviated Prescribing Information

PerioChip® 2.5 mg Dental Insert [chlorhexidine digluconate]

For full prescribing information, including side effects, precautions and contraindications, see Summary of Product Characteristics (SmPC).

Presentation: Dental insert: bullet shaped orange brown containing chlorhexidine digluconate 2.5 mg.

Indications: PerioChip® is an adjunctive antimicrobial treatment for moderate to severe chronic periodontal disease in adults with pocketing, combined with Root Surface Debridement (RSD). Not indicated in children and adolescents.

Dosage and Administration: One PerioChip® is inserted into a periodontal pocket with a probing pocket depth of ≥ 5 mm. Retreatment with PerioChip® following mechanical plaque removal at 3 month intervals may provide additional benefit if pocket depth remains ≥ 5 mm. For details see SmPC. Removal is unnecessary as PerioChip® biodegrades.

Contraindications: Hypersensitivity to chlorhexidine digluconate or excipients.

Precautions: Allergic reactions have occurred but are rare.

Interactions: Avoid nystatin: antagonistic of chlorhexidine. Chlorhexidine is incompatible with anionic agents present in some toothpastes and with dietary sucrose, but there is no significant impact on the efficacy of PerioChip®.

Undesirable effects: During the first few days after insertion, transient pain or discomfort of gums or teeth; redness and/or swelling of the gums.

Overdose: Not reported.

Pregnancy/ Lactation: Controlled studies in pregnant women have not been conducted, so weigh expected benefits against possible foetal risks: caution in nursing mothers (see SmPC).

Legal category: P, Product Licence Number: PL 14017/0035

MA holder: Full prescribing information is available on request from:

Dexcel Pharma Ltd, 7 Sopwith Way, Drayton Fields Industrial Estate. Daventry. Northants. NN11 8PB.

Adverse events should be reported.

Reporting forms and information can be found at: www.mhra.gov.uk/yellowcard

Adverse events should also be reported to: Dexcel Pharma Ltd on 01748 828784

DPD/15/0021

Date of preparation Aug 2017



How to store PerioChip®? Are all patients suitable for PerioChip®?

How many

patients does one pack treat?

PerioChip® should be stored at a room temperature, not exceeding 30°C.

PerioChip® is suitable for pockets of 5 mm or deeper. Clinical studies in pregnant or breast feeding women have not been conducted and use on such patients is a clinical decision between the dentist and the patient.

This depends on the number of pockets x the number of visits. Please refer to page 9 for suggested treatment plan.

What is the pack size?

Can the patient

CHX mouthwash?

still use

PerioChip® comes in a pack of 20 individual chips.

Yes, patients can still use CHX mouthwash.

How many chips can be placed in the mouth at any one time?

There is no maximum number.

Can chips fall out?

- in pockets of 5 mm or deeper, PerioChip® remains subgingival and adheres to the tooth meaning that it will not fall out. We advise that patients refrain from any interdental cleaning for 24h post application.

If placed as indicated

Will the patient get staining?

Chlorhexidine can stain teeth. However, as **PerioChip**® is placed subgingivally, there should be no visible staining above the gum line.

What are the post operative instructions for patients?

Patients should be advised against carrying out any inter-dental cleaning for 24 hours after placement.