

# Clinical Case Reports

Before & After Treatment with Curodont™ Repair Fluoride Plus

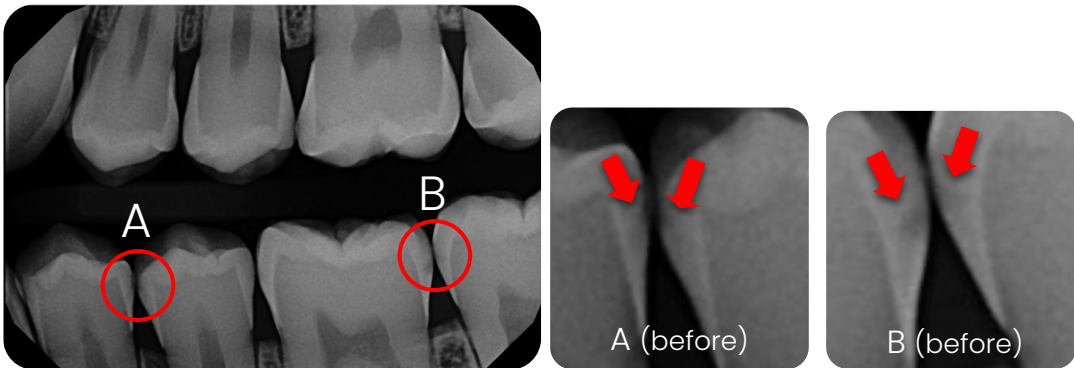


# Disclaimer

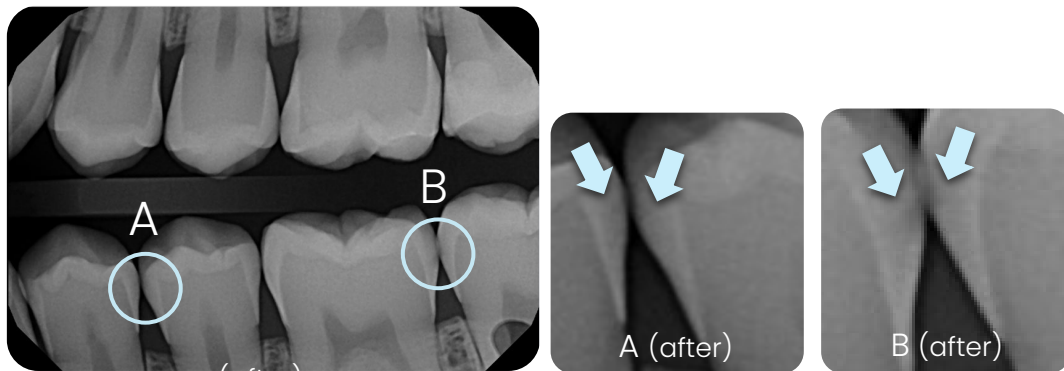
- Curodont Repair Fluoride Plus is a rinse intended for use on early carious lesions, including those appearing as white spot lesions, to aid in the prevention of dental cavities.
  - Please read the instructions for use carefully for the recommended application protocol and for full labelling information.
  - Curodont Repair Fluoride Plus is intended for intraoral professional use only. This product is not intended for home or unsupervised consumer use. Keep out of reach of children. If more than used for rinsing is accidentally swallowed, seeks medical help or contact a poison control center right away.
- Individual results may vary from those presented in these materials. These results are self-reported by dentists using Curodont Repair Fluoride Plus in their practices. None of these dentists received monetary support or product in exchange for these case studies.
- The result of treatment with Curodont Repair Fluoride Plus and the period of time in which it is achieved may be affected by a number of patient factors such as salivary quality and flow, diet, caries activity, oral hygiene maintenance, etc.
- Curodont Repair Fluoride Plus is not a cosmetic treatment. While some improvement in the appearance of carious white spot lesions may occur as a result of remineralization, they might not completely disappear.



# Case 1. Multiple post-orthodontic interproximal initial carious Lesions



**Figure 1: Before:** Multiple interproximal carious lesions in enamel diagnosed (2.20.2023); lesions put on watch. CRFP applied after 6 months on 8.9.2023.



**Figure 2: After:** 6 months post-treatment with CRFP (2.22.2024), the bitewing x-ray revealed regression of the lesions

These results may not be typical. Individual results may vary.



**Patient Presentation and examination:** In a 14-year-old male patient, on routine bitewing radiographs taken after the completion of orthodontic treatment, multiple radiolucencies were observed in the enamel of the interproximal surfaces of #18 (mesial), #19 (distal), #20 (mesial), and #21 (distal), suggestive of initial caries. (Figure 1)



**Diagnosis:** Based on the radiographic findings, the diagnoses were as follows:

- #18 (mesial): Initial caries extending to the inner half of enamel (E2)
- #19 (distal): Initial caries extending to the inner half of enamel (E2)
- #20 (mesial): Initial caries extending to the outer half of enamel (E1)
- #21 (distal): Initial caries extending to the outer half of enamel (E1)



**Treatment:** The lesions were first put on a 'watch' for 6 months and then treated with Curodont Repair Fluoride Plus, followed by fluoride varnish. The patient continued the use of his prescription-strength toothpaste at home.



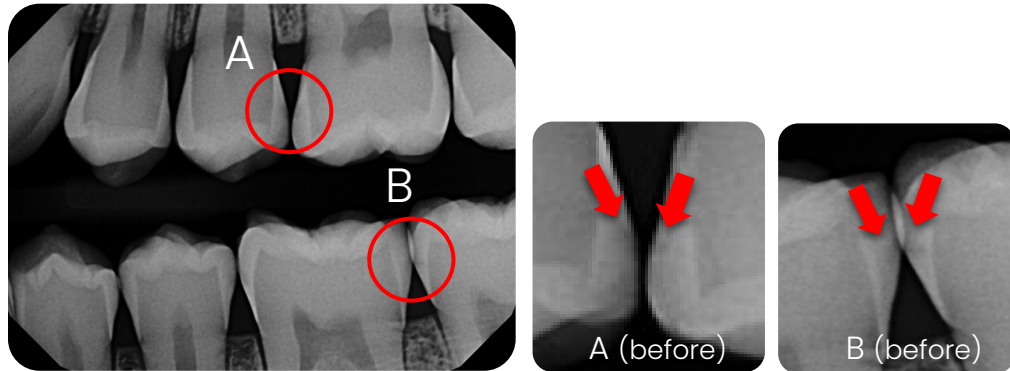
**Follow-up:** At the 6-month follow-up, regression of the lesions on #18 and #19 to E1 and those on #20 and #21 to E0 was observed, evident on a bitewing x-ray (Figure 2)



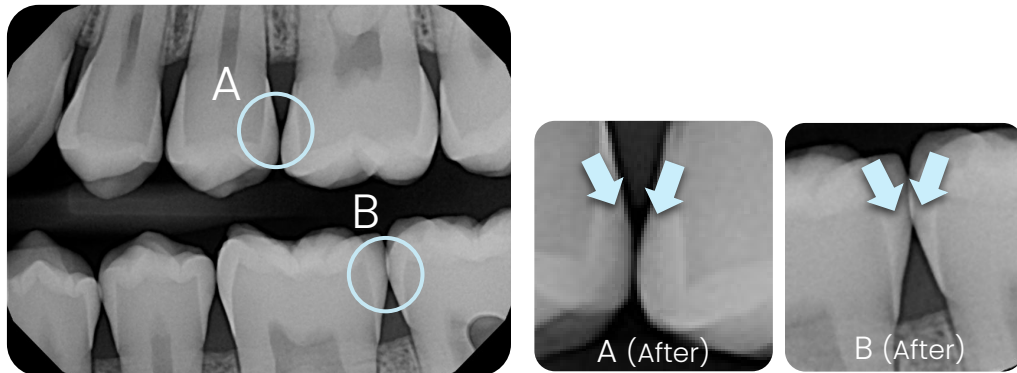
**Take-away:** Curodont Repair Fluoride Plus can be used as a **proactive treatment** of initial caries rather than risking progression by 'waiting-and-watching.'



# Case 2. Multiple post-orthodontic interproximal initial carious Lesions



**Figure 1: Before:** Multiple interproximal carious lesions in enamel diagnosed (2.20.2023); lesions put on watch. CRFP applied after 6 months on 8.9.23.



**Figure 2: After:** 6 months post-treatment with CRFP (2.22.2024), the bitewing x-ray revealed regression of the lesions

These results may not be typical. Individual results may vary.



**Patient Presentation and examination:** In a 14-year-old male patient, on routine bitewing x-rays taken after the completion of orthodontic treatment, multiple radiolucencies were observed in the enamel of the interproximal surfaces of #13 (distal), #14 (mesial), #18 (mesial), and #19 (distal), suggestive of initial caries. (Figure 1)



**Diagnosis:** Based on the radiographic findings, the diagnoses were as follows:

- #13 (distal): Initial caries extending to the outer half of enamel (E1)
- #14 (mesial): Initial caries extending to the outer half of enamel (E1)
- #18 (mesial): Initial caries extending to the inner half of enamel (E2)
- #19 (distal): Initial caries extending to the outer half of enamel (E1)



**Treatment:** The lesions were first put on a watch for 6 months and then treated with **Curodont Repair Fluoride Plus**, followed by fluoride varnish. The patient continued the use of his prescription-strength toothpaste at home.



**Follow-up:** At the 6-month follow-up, regression of the lesions on #13, #14 and #19 to E0 and that of the lesion on #18 to E1 was observed, evident on a bitewing x-ray (Figure 2)



**Take-away:** Curodont Repair Fluoride Plus can be used as a **proactive treatment** of initial caries rather than risking progression by waiting and watching.



## Case 3. Interproximal initial carious lesions in the esthetic zone

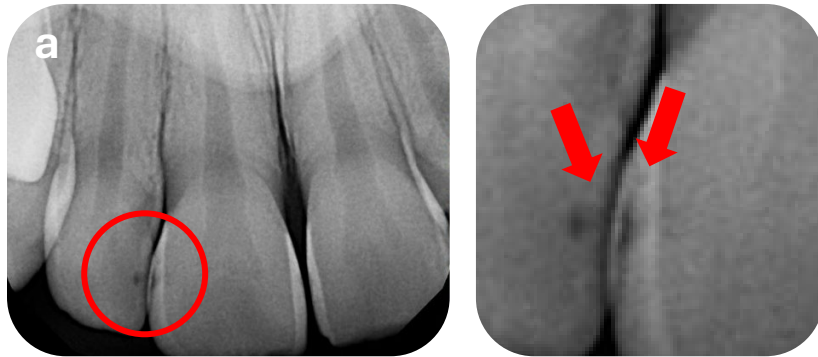


Figure 1: Before: Radiolucencies suggestive of initial caries observed on #7 (D1) and #8 (E2).

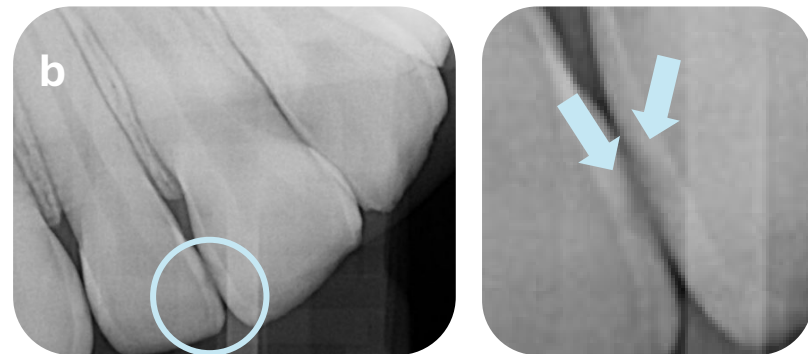


Figure 2: After: 19-month follow-up post treatment with CRFP revealed regression and reduced radiolucency of the lesions.

These results may not be typical. Individual results may vary.



**Patient Presentation and examination:** In a young patient, during a routine full-mouth examination, small discolorations were noted on the mesial and distal surfaces of #7 & #8, respectively. Peri-apical radiographs revealed radiolucencies on both teeth, suggestive of initial caries.



**Diagnosis:** Based on the radiographic findings, initial caries extending to the outer third of dentin (D1) on #7 and to the inner half of enamel (E2) on #8 were diagnosed. (Figure 1)



**Treatment:** The lesions were treated with **Curodont Repair Fluoride Plus** in the same appointment.



**Follow up:** The 19-month follow-up x-ray revealed regression of the lesion on #7 to E2, arrest of the lesion on #8, and reduction in the radiolucencies of both lesions. (Figure 2)



**Take-away:** Treatment of initial carious lesions in the anterior teeth can be considered when trying to avoid the need of restorations in the esthetic zone. Curodont Repair Fluoride Plus enables non-invasive treatment of these lesions through an easy, quick, and painless procedure.



## Case 4. White spot lesions during fixed orthodontic therapy



**Figure 1: Before:** White spot lesions seen around bonded brackets on #7, #8, #9, and #10 (7.5.2023)



**Figure 2: After:** 5 months post CRFP, a visible reduction in size and appearance of the white spot Lesions observed (12.13.2023)

These results may not be typical. Individual results may vary.



**Patient Presentation and examination:** In a 10-year-old female patient, during an orthodontic adjustment appointment, white spot lesions with rough surfaces were observed around the bonded brackets on the labial surfaces of maxillary incisors. There were signs of improper oral hygiene maintenance including plaque deposition and gingival inflammation.



**Diagnosis:** Initial carious lesions, seen as white spot lesions, were diagnosed on the labial surfaces of #7, #8, #9, and #10. (Figure 1)



**Treatment:** After thorough scaling and polishing, the white spot lesions were treated with **Curodont Repair Fluoride Plus**. The patient was counselled on proper brushing technique.



**Follow-up:** After 5 months, the white spot lesions appeared reduced. The central incisors demonstrated almost total regression of the lesions. (Figure 2)



**Take-away:** Oral hygiene maintenance is often complicated during fixed orthodontic therapy, making initial caries, seen as white spot lesions, around bonded brackets a common occurrence. Curodont Repair Fluoride Plus can be used, with improved oral hygiene, to treat these lesions, when they're detected, without de-bonding the brackets.



# Case 5. Interproximal initial carious lesion interpreted with AI

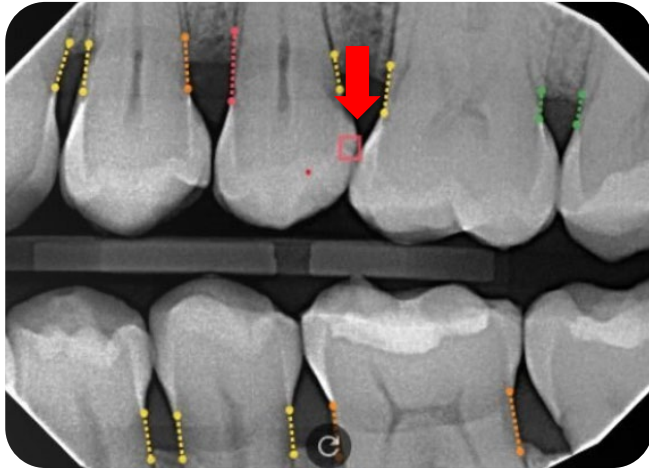


Figure 1: Before: Proximal lesion (E2) on distal surface of #13.

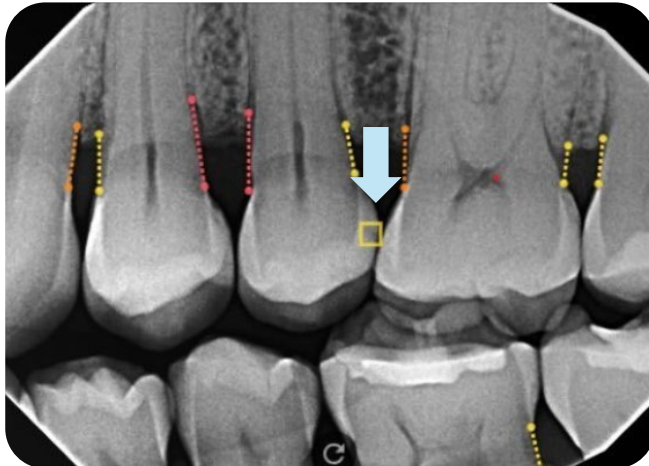


Figure 2: After: At the 4-month follow-up post CRFP, regression of the lesion to E1 was observed, confirmed with AI.

These results may not be typical. Individual results may vary.



**Patient Presentation and examination:** In a 50-year-old male patient, during a routine radiographic examination, a radiolucency was noted in the enamel of the distal surface of #13, suggestive of initial caries. This was highlighted well by the AI software (Videa Health AI)



**Diagnosis:** Based on the radiograph, initial caries extending to the inner half of enamel (E2) on the distal surface of #13 was diagnosed. (Figure 1)



**Treatment:** The lesion was treated with one application of **Curodont Repair Fluoride Plus** in the same appointment.



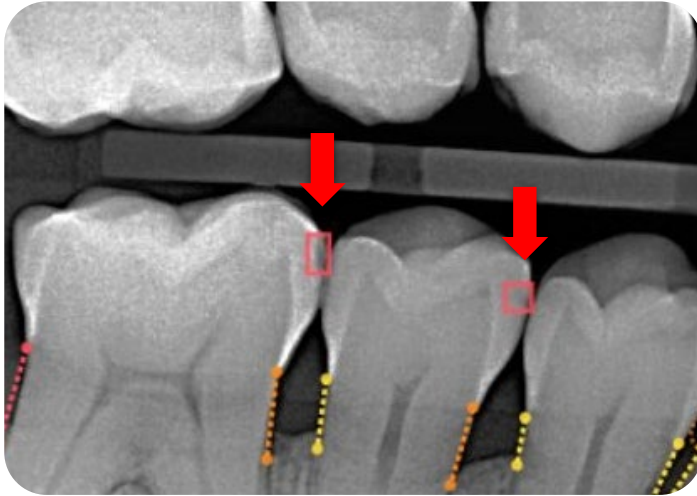
**Follow-up:** The 4-month follow-up revealed regression of the lesion to the outer half of enamel (E1), which was confirmed by the AI software. (Figure 2)



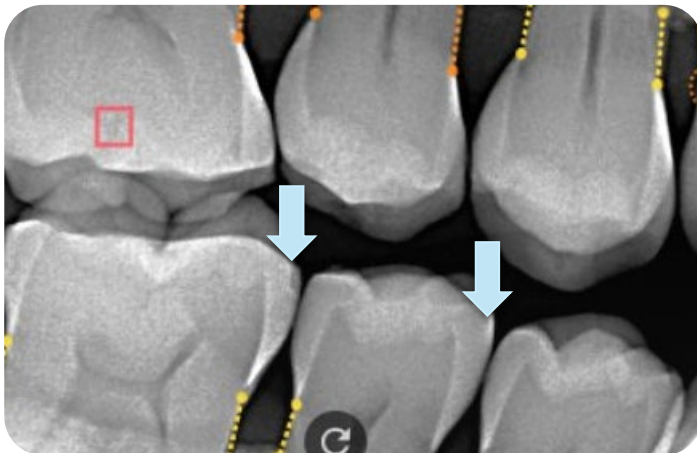
**Take-away:** One of the major roadblocks to early caries treatment is the difficulty in diagnosing it. The use of AI with radiographs is a new tool to not only diagnose initial carious lesions but also to monitor the progress of the treatment after they are treated with Curodont Repair Fluoride Plus.



## Case 6. Interproximal initial carious lesions interpreted with AI



**Figure 1: Before:** Proximal lesions detected with bitewing radiographs on mesial surfaces of #29 & #30.



**Figure 2: After:** At the 4 month follow up post CRFP, the AI did not detect the area as caries.

These results may not be typical. Individual results may vary.



**Patient Presentation and examination:** In a 50-year-old male patient, during a routine radiographic examination, radiolucencies in the enamel of the mesial surfaces of #29 and #30 were detected on a bitewing x-ray using an AI software (Videa Health AI), suggestive of initial caries.



**Diagnosis:** Based on the radiograph, initial caries extending to the outer half of enamel (E1) on the mesial surfaces of #29 and #30 were diagnosed. (Figure 1)



**Treatment:** The lesions were treated each with one application of **Curodont Repair Fluoride Plus** in the same appointment.



**Follow-up:** The 4-month follow-up revealed regression of the lesions, indicated by an absence of radiolucency, and the confirmation of the same with AI. (Figure 2)



**Take-away:** A majority of initial carious lesions are on interproximal surfaces and are asymptomatic.\* Their diagnosis can be facilitated by the use of AI on bitewing x-rays. Treating these lesions with Curodont Repair Fluoride Plus, along with improvement in oral hygiene maintenance and diet, may help with lesion regression.





# Case 7. Interproximal initial carious lesions interpreted with AI



**Figure 1:** Before: Proximal lesion detected on the mesial surface of #11



**Figure 2:** After: At the 4 month follow up post CRFP, the AI did not detect the area as caries.

These results may not be typical. Individual results may vary.



**Patient Presentation and examination:** In a 66-year-old female patient, during a routine dental check up, a radiolucency in the enamel of the mesial surface of #11 was detected on a periapical x-ray using an AI tool (Videa Health AI), suggestive of initial caries.



**Diagnosis:** Based on the radiograph, initial caries extending to the inner half of enamel (E2) on the mesial surface of #11 was diagnosed. (Figure 1)



**Treatment:** The lesion was treated with one application of **Curodont Repair Fluoride Plus** in the same appointment.



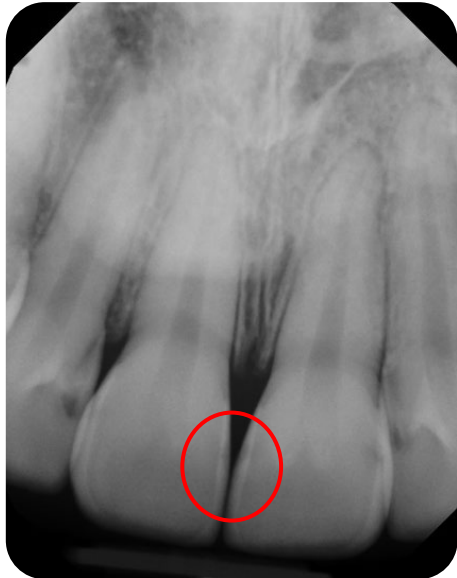
**Follow-up:** The 4-month follow-up revealed regression of the lesion, indicated by an absence of radiolucency, and the confirmation of the same with AI. (Figure 2)



**Take-away:** The use of AI with radiographs is a new tool to not only diagnose initial carious lesions but also to monitor the progress of the treatment after they are treated with Curodont Repair Fluoride Plus.



## Case 8. Interproximal initial carious lesions in anterior teeth



**Figure 1:** Before: Initial caries extending to the inner halves of enamel (E2) on the mesial surfaces of #8 and #9



**Figure 2:** After: 3 months post-CRFP, regression of the lesion #8 and stability in that on #9

These results may not be typical. Individual results may vary.



**Patient Presentation and examination:** In a 15-year-old patient, during a routine radiographic examination, radiolucencies in the enamel of mesial surfaces of #8 and #9 and those extending to the dentin in the mesial surface of #7 and distal surface of #8 were noted.



**Diagnosis:** Based on the radiographs, the diagnoses were as follows:

#8 (mesial), #9 (mesial): initial caries in the inner half of enamel (E2)

#7 (mesial): Caries extending to the middle third of dentin (D2)

#8 (distal): Caries extending to the outer third of dentin (D1)



**Treatment:** The caries in the enamel (#8-mesial, #9-mesial) were treated with **Curodont Repair Fluoride Plus** and the caries extending to the dentin (#7-mesial and #8-distal) were treated with restorations.



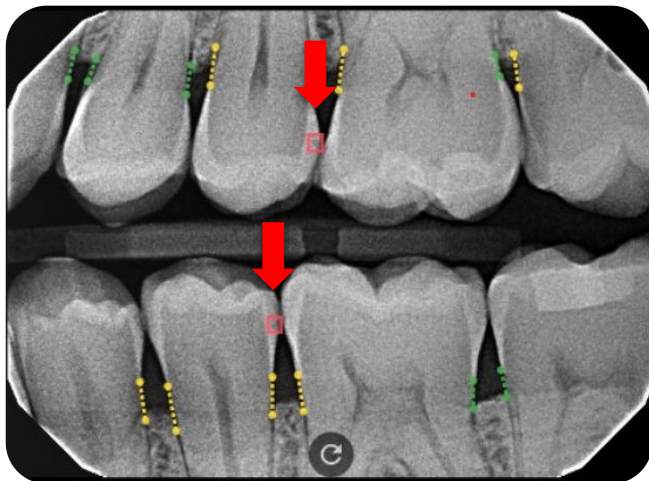
**Follow up:** On the 3-month follow-up, the lesion on #8-mesial showed regression to the outer half of enamel (E1) and that on #9 stayed stable, indicating arrest of progression.



**Take-away:** Successful restorations in the esthetic zone can be difficult. Monitor these teeth and consider treating initial caries in this region, when they are diagnosed, with Curodont Repair Fluoride Plus. The 'wait-and-watch' approach could result in their progression into cavities and need for restorations.



# Case 9. Interproximal initial carious lesion interpreted with AI



**Figure 1:** Before: Initial carious lesions on #13 (distal) and #20 (distal) extending to the outer half of enamel (E1)



**Figure 2:** After: At the 7 month follow up, regression of the lesions was seen, and confirmed with AI.

These results may not be typical. Individual results may vary.



**Patient Presentation and examination:** In a 32-year-old male patient, in a radiographic examination during an oral hygiene recall, small radiolucencies were noted in the enamel of the distal surfaces of #13 and #20, suggestive of initial caries. This was highlighted well by the AI software (Videa Health AI)



**Diagnosis:** Based on the radiograph, initial caries extending to the outer half of enamel (E1) on the distal surfaces of #13 and #20 were diagnosed. (Figure 1)



**Treatment:** The lesion was treated with **Curodont Repair Fluoride Plus** in the same appointment.



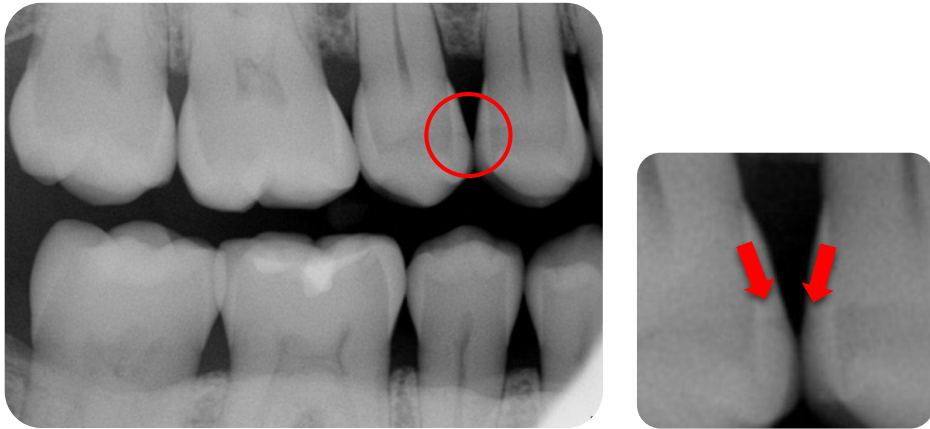
**Follow-up:** The 7-month follow-up revealed complete regression of the lesions (E0), which was confirmed by the AI software. (Figure 2)



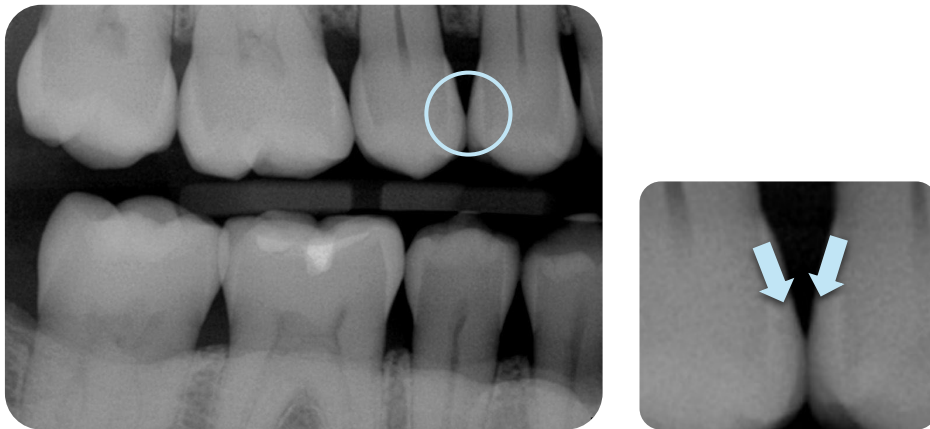
**Take-away:** The early stages of caries can be remineralized when diagnosed in time and treated with Curodont Repair Fluoride Plus, along with improved oral hygiene. A majority of these are on the proximal tooth surfaces and the use of AI can facilitate their detection on bite-wing x-rays.



## Case 10. Interproximal initial carious lesions treated with CRFP and Curodont Protect



**Figure 1:** Before: Initial carious lesions on #4(mesial) and #5(distal) extending to the outer half of enamel (E1)



**Figure 2:** After: At the 6 month follow up, reduction in size and radiolucency seen.

These results may not be typical. Individual results may vary.



**Patient Presentation and examination:** A 49-year-old female dental hygienist, during her routine radiographic examination, noticed small radiolucencies in the enamel of the mesial surface of #4 and distal surface of #5, suggestive of initial caries.



**Diagnosis:** Based on the radiographs, initial caries extending to the outer half of enamel (E1) on #4 (mesial) and #5 (distal) were diagnosed. (Figure 1)



**Treatment:** The lesions were treated with **Curodont Repair Fluoride Plus** in the same appointment. This was followed by the at-home use of **Curodont Protect** on the treated area.



**Follow-up:** The 6-month follow-up revealed reduction in the size and radiolucency of both lesions, indicating regression of both lesions. (Figure 2)



**Take-away:** Carious lesions on proximal surfaces may escape detection until they cavitate, at which point restorations are the only mode of treatment available. Thus, radiographs in routine check-ups must be assessed carefully to diagnose initial carious lesions, which can then be treated non-invasively with Curodont Repair Fluoride Plus. Curodont Protect is the ideal complement to Curodont Repair Fluoride Plus and it helps to foster patient engagement and maximize compliance.