

MTA Canal Obturation OrthoMTA

IJOS
International Journal of
ORAL SCIENCE

Bacterial entombment by intratubular mineralization following orthograde mineral trioxide aggregate obturation: a scanning electron microscopy study

Jun Sang Yoo^{1,*}, Seok-Woo Chang^{2,*}, So Ram Oh³, Hiran Perinpanayagam⁴, Sang-Min Lim⁵, Yeon-Jee Yoo³, Yeo-Rok Oh¹, Sang-Bin Woo¹, Seung-Hyun Han⁶, Qiang Zhu⁷ and Kee-Yeon Kum³
www.nature.com/ijos

Root Canal Obturation

Bactericidal pH 12.5, Calcium hydroxide effect

Sealability Bacterial entombment and fossilization

Biocompatibility New cementum formation

Retrievability Chemically and mechanically

Technique Dr. Yoo's Orthograde filling method



Package

OrthoMTA 10g x1, Carrier x1, Needle tip x50,
Bender x1, Compacter x3, Plugger x1, Cotton buds x80

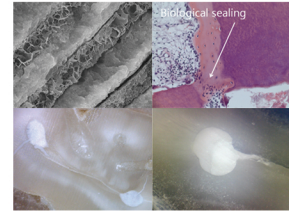


BioMTA

Seoul National University, Research Park Main Center #323
Gwanak ro1, Gwanak-gu Seoul 151-919, Korea
TEL 02-779-2880/2881 FAX 02-454-2885 <http://www.biomta.com>

Make Teeth Alive

Make Teeth Alive OrthoMTA FAQ



Indications?

For file separation cases, cracked teeth, severely infected canal, c-shape canal obturation, retreatment, internal resorption and apical perforation cases.

Differences with other MTAs?

OrthoMTA is bioceramic, other MTA is Portland cement based.
OrthoMTA is for root canal obturation, other MTA is for root repair.

Reason for doing total canal filling?

To prevent path of bacterial penetration into the canal and ensure perfect sealability to rule out differential diagnosis to give better treatment and outcome.

Apical Stop formation and easier handling method?

Difficulty in forming the apical stop is because of the wetness inside the canal. MTA only coats the wall but not fill the canal. Use paper points to absorb excess water and then use compacter to fill the canal.

Retrieving after it has set?

After it has set, the compressive strength is 25MPa. For gross removal, dental bur is used and for the remaining particles, Retx Sol is used.
However, if OrthoMTA is used to obturate the canal properly, retreatment is not the cause of reinfection.

Effect on cracked tooth?

Bactericidal effect will minimize pain or discomfort, not recover to its original form.

Radio-opacity?

If more than 25% contrast medium is added, it will be more radiopaque but it will weaken the biocompatibility of MTA.

Over Filling?

No pain or discomfort is felt because it neutralizes the pH of tissue but deliberate overfilling is not recommended.

Enlargement and Irrigation?

0.02 taper, #25 file and above is recommended for canal enlargement. Greater taper shaping on the coronal area is not recommended because OrthoMTA is a micron-sized powder that can be filled and packed.

Avoid excessive irrigation with NaOCl and avoid usage of EDTA. Not only they weaken the root but interferes with the setting action of MTA. Prepare a 1:1 solution of H₂O₂ and Hexamedine and use this for irrigation. According to a journal, remaining hexamedine after irrigation provides a long-term antimicrobial effect.