

Name of Journal: *World Journal of Orthopedics*

Manuscript NO: 59440

Manuscript Type: ORIGINAL ARTICLE

Basic Study

Osseointegration of porous titanium and tantalum implants in ovariectomized rabbits: A biomechanical study

Bondarenko S *et al.* Osseointegration of metal implants in ovariectomized rabbits

Stanislav Bondarenko, Volodymyr Filipenko, Michael Karpinsky, Olena Karpinska, Gennadiy Ivanov, Valentyna Maltseva, Ahmed Amine Badnaoui, Ran Schwarzkopf

Match Overview

- | Match Number | Source | Words | Similarity |
|--------------|---|----------|------------|
| 1 | Crossref | 18 words | 1% |
| | Stanislav Bondarenko, Ninel Dedukh, Volodymyr Filipenko, Mandus Akonjom, Ahmed Amine Badnaoui, Ran Schwarzkopf, ... | | |
| 2 | Internet | 17 words | 1% |
| | crawled on 09-Nov-2020
josr-online.biomedcentral.com | | |



ALL

IMAGES

VIDEOS

48,000 Results

Any time ▾

Biomechanical analysis of the osseointegration of porous ...

<https://pubmed.ncbi.nlm.nih.gov/31703918>

Statement of problem: Although **implants** containing **porous tantalum** undergo **osseointegration**, whether this material significantly alters new bone formation and improves **implant stability** during healing in comparison to **titanium** is unclear. Purpose: The purpose of this in vivo study was to determine the influence of the inclusion of **porous tantalum** into a **dental implant** on the biomechanical properties of the **bone-implant** interface and **peri-implant bone** which may contribute to **secondary implant** ...

Cited by: 3

Author: David Fraser, Paul Funkenbusch, Carlo E...

Publish Year: 2020

Osseointegration of porous titanium implants with and ...

<https://josr-online.biomedcentral.com/articles/10.1186/1749-799X-6-56> ▾

The mode of failure for the plasma sprayed **titanium implants** is illustrated in Figure 1, where the fracture plane was typically coincident with the host bone/de novo bone interface. An exception to this rule were the 1 and 2 week timepoints, where the fracture plane was coincident with the de novo bone **implant** interface, and which may be indicative of insufficient appositional bone growth.

Cited by: 23

Author: Dong Chen, Nicky Bertollo, Abe Lau, Nao...

Publish Year: 2011

Estimated Reading Time: 10 mins

Biomechanical analysis of the osseointegration of porous ...

<https://www.sciencedirect.com/science/article/pii/S0022391319306067>

Jun 01, 2020 - Although **implants** containing **porous tantalum** undergo **osseointegration**, whether this material significantly alters new **bone formation** and improves **implant stability** during healing in comparison to **titanium** is unclear.

Cited by: 3

Author: David Fraser, Paul Funkenbusch, Carlo E...

Publish Year: 2020

Osseointegration of titanium alloy and HA-coated implants ...

onlinelibrary.wiley.com/doi/10.1111/j.1600-0501.2009.01739.x/abstract

Oct 11, 2009 - Objectives: The objective of the present **study** is to evaluate the response to dental **implants** in healthy and osteoporotic bone. Materials and methods: Ten ovariectomized (OVX) New Zealand **rabbits** submitted to a hypocalcic diet and 10 sham-aged **rabbits** were used. All animals were submitted to bone mineral density (BMD) measurements before ovariectomy, and also 4 months ...

Osseointegration of porous titanium and tantalum implants in ovari



ALL

IMAGES

VIDEOS

44,800 Results

Any time ▾

Biomechanical analysis of the osseointegration of porous ...

<https://pubmed.ncbi.nlm.nih.gov/31703918>

Biomechanical analysis of the **osseointegration of porous tantalum implants**. The stiffness of the **bone-implant** interface was similar for threaded titanium implants with or without porous **tantalum** when placed in the rabbit tibia and allowed to heal for at least 4 weeks. The new **peri-implant** bone adjacent to dental **implants** containing **porous tantalum** showed no difference in na

Cited by: 4

Author: David Fraser, Paul Funkenbusch, Carlo Erco...

Publish Year: 2020

Osseointegration of porous titanium implants with and ... 10 mins read

<https://josr-online.biomedcentral.com/articles/10.1186/1749-799X-6-56> ▾

Nov 03, 2011 · The mode of failure for the plasma sprayed **titanium implants** is illustrated in Figure 1, where the fracture plane was typically coincident with the host bone/de novo bone interface. An exception to this rule were the 1 and 2 week timepoints, where the fracture plane was coincident with the de novo bone **implant** interface, and which may be indicative of insufficient appositional bone growth.

Cited by: 24

Author: Dong Chen, Nicky Bertollo, Abe Lau, Naoya ...

Publish Year: 2011

Biomechanical analysis of the osseointegration of porous ...

<https://www.sciencedirect.com/science/article/pii/S0022391319306067>

Jun 01, 2020 · Although **implants** containing **porous tantalum** undergo **osseointegration**, whether this material significantly alters new bone formation and improves **implant** stability during healing in

Search Tools

Turn off Hover Translation (关闭取词)

ALL

IMAGES

VIDEOS

MAPS

NEWS

SHOPPING

45,200 Results

Any time ▾

Biomechanical analysis of the osseointegration of porous ...

<https://pubmed.ncbi.nlm.nih.gov/31703918>

Biomechanical analysis of the **osseointegration of porous tantalum implants**. The stiffness of the **bone-implant** interface was similar for threaded titanium implants with or without porous **tantalum** when placed in the rabbit tibia and allowed to heal for at least 4 weeks. The new **peri-implant** bone adjacent to dental **implants** containing **porous tantalum** showed no difference in na ...

Cited by: 4

Author: David Fraser, Paul Funkenbusch, Carlo Erco...

Publish Year: 2020

Osseointegration of titanium implants in total hip ...

<https://pubmed.ncbi.nlm.nih.gov/2245538>

Osseointegration is defined as direct contact on the light microscopic level between living bone tissue and the **implant**. Using **titanium** screw dental **implants** in the jaw, a lasting interface under loaded conditions extending over a 20-year follow-up period has been demonstrated. This demonstration br ...

Cited by: 20

Author: John W. Mccutchen, John P. Collier, Michae...

Publish Year: 1990

Biomechanical analysis of the osseointegration of porous ...

<https://www.sciencedirect.com/science/article/pii/S0022391319306067>

Jun 01, 2020 · Although **implants** containing **porous tantalum** undergo **osseointegration**, whether this material significantly alters new bone formation and improves **implant** stability during healing in comparison to **titanium** is unclear.

Cited by: 4

Author: David Fraser, Paul Funkenbusch, Carlo Erco...

Publish Year: 2020

Osseointegration of porous titanium implants with and ...

<https://josr-online.biomedcentral.com/articles/10.1186/1749-799X-6-56> ▾

Nov 03, 2011 · The percentage ingrowth for both test materials in the current **study** averaged approximately 37% at 2 weeks, as compared to the 13% ingrowth obtained for a **porous tantalum implant** . **Tantalum** has been recognized as having excellent bone and fibrous ingrowth properties, allowing for rapid and substantial bone and soft tissue attachment . Direct comparison of these results is fraught with difficulty, though, due to differences between studies in terms of **implant** ...

Cited by: 24

Author: Dong Chen, Nicky Bertollo, Abe Lau, Naoya ...

Publish Year: 2011