

Name of Journal: *World Journal of Gastrointestinal Oncology*

Manuscript NO: 60179

Manuscript Type: ORIGINAL ARTICLE

Basic Study

Influence of heat irrigating effect of radiofrequency ablation on regional liver tissue in Bama Miniature Pigs

Effect of RFA on the regional liver

Abstract

BACKGROUND

The results of heat irrigating effect of radiofrequency ablation were uncertain, and the accurate impact of heat irrigating effect on regional liver tissue was unknown due to lack of control experiments.

AIM

Match Overview

1	Crossref 34 words Wei-Yuan Wei. " E2F-1 overexpression inhibits human gastri ... cancer MGC-803 cell growth ", World Journal of Gastroentero	1%
2	Internet 25 words crawled on 22-Jul-2020 pesquisa.bvsalud.org	1%
3	Crossref 15 words K. Jiang, J. Dong, W. Zhang, Y. Liu, M. Su, X. Zhao, J. Wang, M. Yao, Z. Huang. "Effect of one-off complete tumor radiofreq	<1%
4	Internet 12 words crawled on 23-May-2020 worldwidescience.org	<1%
5	Internet 12 words www.ncbi.nlm.nih.gov	<1%

Influence of heat irrigating effect of radiofrequency ablation on regi



ALL

IMAGES

VIDEOS

21,500 Results

Any time ▾

Heat-Irrigate Effect' of Radiofrequency Ablation on ...

<https://www.ncbi.nlm.nih.gov/pubmed/25416583>

Radiofrequency ablation (RFA) is one of the effective methods for HCC treatment. However, because of the "heat-sink effect" (HSE), it is very difficult to achieve a complete ablation in intrahepatic tumors. This study establishes the **animal model of RFA on living swine liver and observes the 'heat-irrigate effect' on relevant regional hepatocytes.**

Cited by: 6

Author: Kai Jiang, Jiye Chen, Yang Liu, Jiang Liu, Ai...

Publish Year: 2015

Heat-Irrigate Effect' of Radiofrequency Ablation on ...

https://www.researchgate.net/publication/268789529_Heat-Irrigate_Effect'_of...

Radiofrequency ablation (RFA) is one of the effective methods for HCC treatment. However, because of the "heat-sink effect" (HSE), it is very difficult to achieve a complete ablation in ...

Hepatic Thermal Ablation: Effect of Device and Heating ...

<https://pubs.rsna.org/doi/full/10.1148/radiol.2016152241>

Jul 13, 2016 · Introduction. Thermal **ablation** with **radiofrequency** (RF) electrical current is used to treat a wide range of tumors in the **liver**, ranging from focal primary hepatocellular carcinoma (HCC) to metastatic colorectal and breast cancers (1–3). Advantages include lower associated morbidity and mortality compared with conventional surgery, use in patients who are not surgical candidates, and ...

Cited by: 27

Author: Velez E, Goldberg Sn, Kumar G, Wang Y, Go...

Publish Year: 2016

Radiofrequency Ablation and Microwave Ablation in Liver ...

<https://theoncologist.onlinelibrary.wiley.com/doi/10.1634/theoncologist.2018-0337>

Influence of heat irrigating effect of radiofrequency ablation on regi



ALL

IMAGES

VIDEOS

6,320 Results

Any time ▾

Heat-Irrigate Effect' of Radiofrequency Ablation on ...

<https://www.ncbi.nlm.nih.gov/pubmed/25416583>

This study establishes the animal model of RFA on **living swine liver** and observes the '**heat-irrigate effect**' on relevant **regional hepatocytes**. Three **liver segments** of 6 Guangxi Bama mini-pigs were selected to be **ablated** closed to segmental outflow vessel under surveillance of sonography for 6 min, and pathological changes of relevant downstream **region** were observed.

Cited by: 6

Author: Kai Jiang, Jiye Chen, Yang Liu, Jiang Liu, Ai...

Publish Year: 2015

Heat-Irrigate Effect' of Radiofrequency Ablation on ...

https://www.researchgate.net/publication/268789529_Heat-Irrigate_Effect'_of...

Radiofrequency ablation (RFA) is one of the effective methods for HCC treatment. However, because of the "**heat-sink effect**" (HSE), it is very difficult to achieve a complete **ablation** in ...

Radiofrequency Ablation of the Pancreas: Protective Effect ...

<https://www.researchgate.net/publication/276211651...>

This study establishes the animal model of RFA on living swine **liver** and observes the '**heat-irrigate effect**' on relevant **regional** hepatocytes. Three **liver** segments of 6 Guangxi **Bama** mini-pigs ...

Hepatic radiofrequency ablation with internally cooled ...

<https://www.researchgate.net/publication/10780976...>

The **heat-sink effect** is quantified based on a temperature factor, which measures the temperature difference between the vessel and the heated **tissue**, and a distance factor, which measures the ...

An analysis of heat transfer in liver tissue during

ALL IMAGES VIDEOS MAPS NEWS SHOPPING

6,260 Results Any time ▾

[Heat-Irrigate Effect' of Radiofrequency Ablation on ...](#)

<https://www.ncbi.nlm.nih.gov/pubmed/25416583>

This study establishes the animal model of RFA on **living swine liver** and observes the '**heat-irrigate effect**' on relevant **regional hepatocytes**. Three **liver segments** of 6 Guangxi Bama mini-pigs were selected to be **ablated** closed to segmental outflow vessel under surveillance of sonography for 6 min, and pathological changes of relevant downstream **region** were observed.

Cited by: 6 **Author:** Kai Jiang, Jiye Chen, Yang Liu, Jiang Liu, Ai...
Publish Year: 2015

[Heat-Irrigate Effect' of Radiofrequency Ablation on ...](#)

<https://link.springer.com/article/10.1007/s12013-014-0398-2>

Nov 22, 2014 · This study establishes the animal model of **RFA** on **living swine liver** and observes the '**heat-irrigate effect**' on relevant **regional hepatocytes**. Three **liver segments** of 6 Guangxi Bama mini-pigs were selected to be **ablated** closed to segmental outflow vessel under surveillance of sonography for 6 min, and pathological changes of relevant downstream **region** were observed.

Cited by: 6 **Author:** Kai Jiang, Jiye Chen, Yang Liu, Jiang Liu, Ai...
Publish Year: 2015

[Heat-Irrigate Effect' of Radiofrequency Ablation on ...](#)

https://www.researchgate.net/publication/268789529_Heat-Irrigate_Effect'_of...

Radiofrequency ablation (RFA) is one of the effective methods for HCC treatment. However, because of the "**heat-sink effect**" (HSE), it is very difficult to achieve a complete **ablation** in ...

PEOPLE ALSO ASK

Can radiofrequency ablation be used on liver tumors? ▾

What is radiofrequency ablation RFA of the liver? ▾

Radiofrequency Ablation

Uses electrical current produced by a radio waves to destroy a part of nerve tissue and relieve pain.

Type of procedure: Minimally invasive

Recovery time: About one day

Duration: Few minutes

Hospital stay: Typically a few hours

May treat

See all (3+)

Arthritis

Very common

A joint disorder which features inflammation of one or more joints.

[Read more](#)

Chronic Pain

Common

Pain that last for more than 3 months.

[Read more](#)

What to expect before procedure

- Provide the doctor with a list of all medications and continue or discontinue taking them as instructed. Inform the doctor about allergies if any.
- Do not eat for 6 hours before the procedure.
- Bring someone along to get a ride home after the procedure.

What to expect during procedure