

Shall we involve this field?

New Sub-Committee proposal for Organs model

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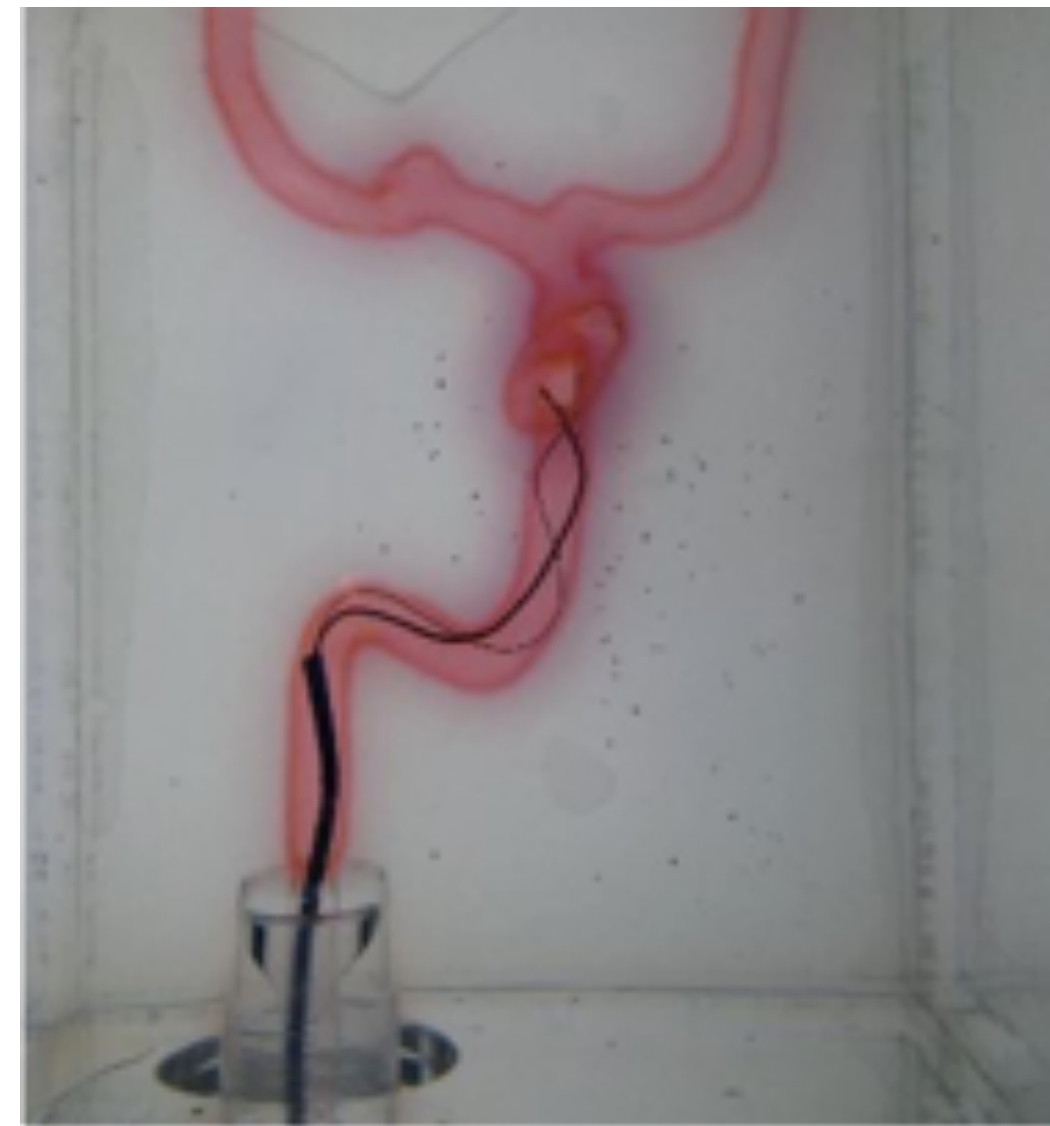
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Organs model

Organs models have been used as performing medical devices



bone model



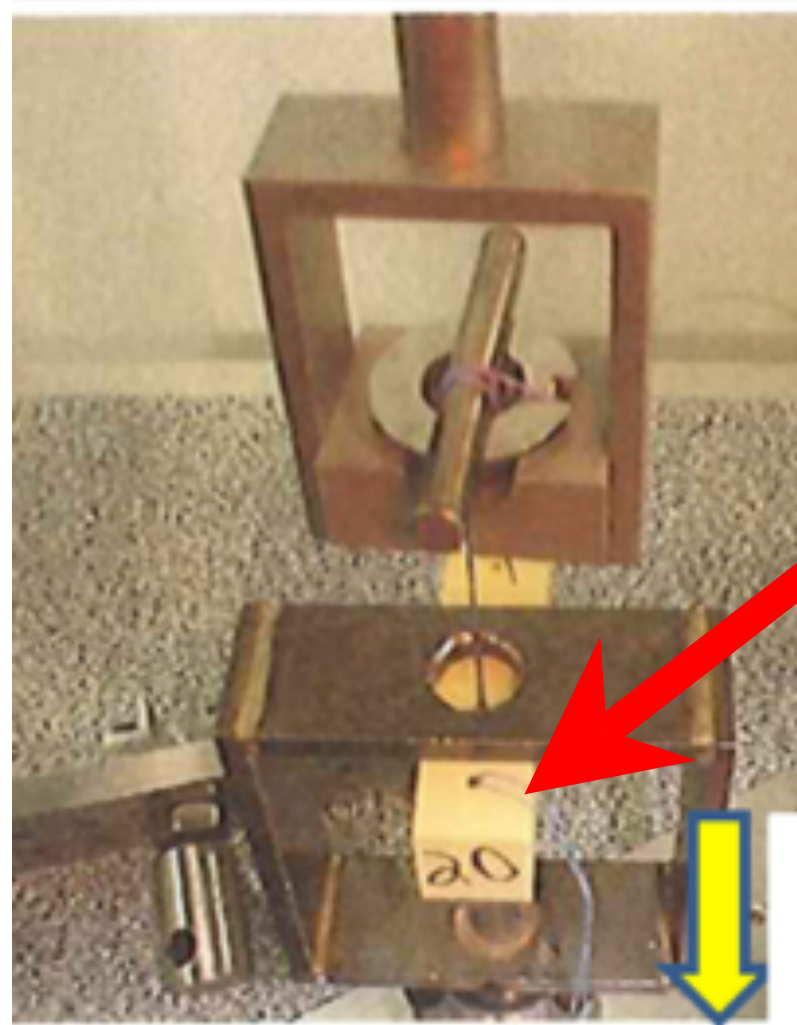
artery model

Bone model : SC 5 WG1, Material test of Bone model

Bone model: Similar mechanical properties to bone

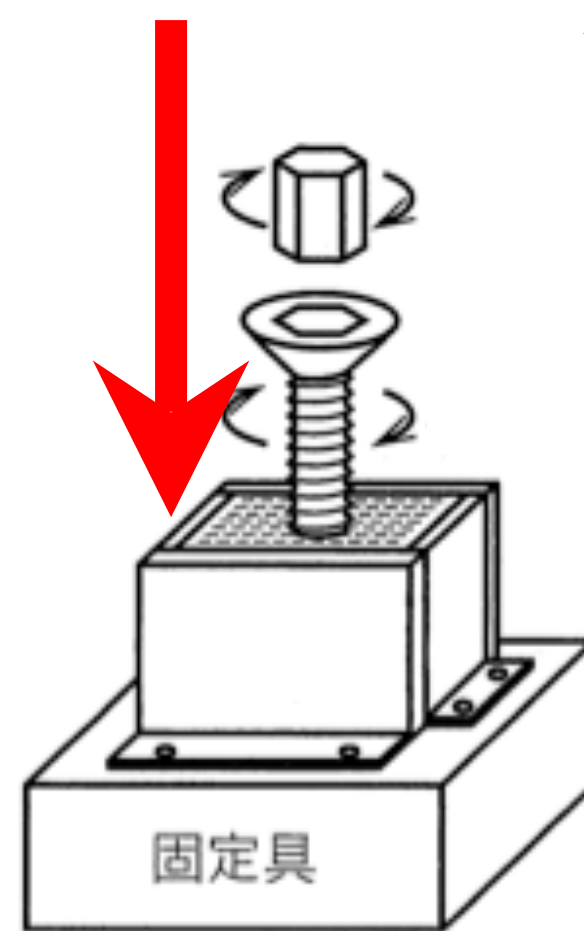
Used for evaluation of medical device

Bone model



Bone screw pull-out test

ASTM F1839



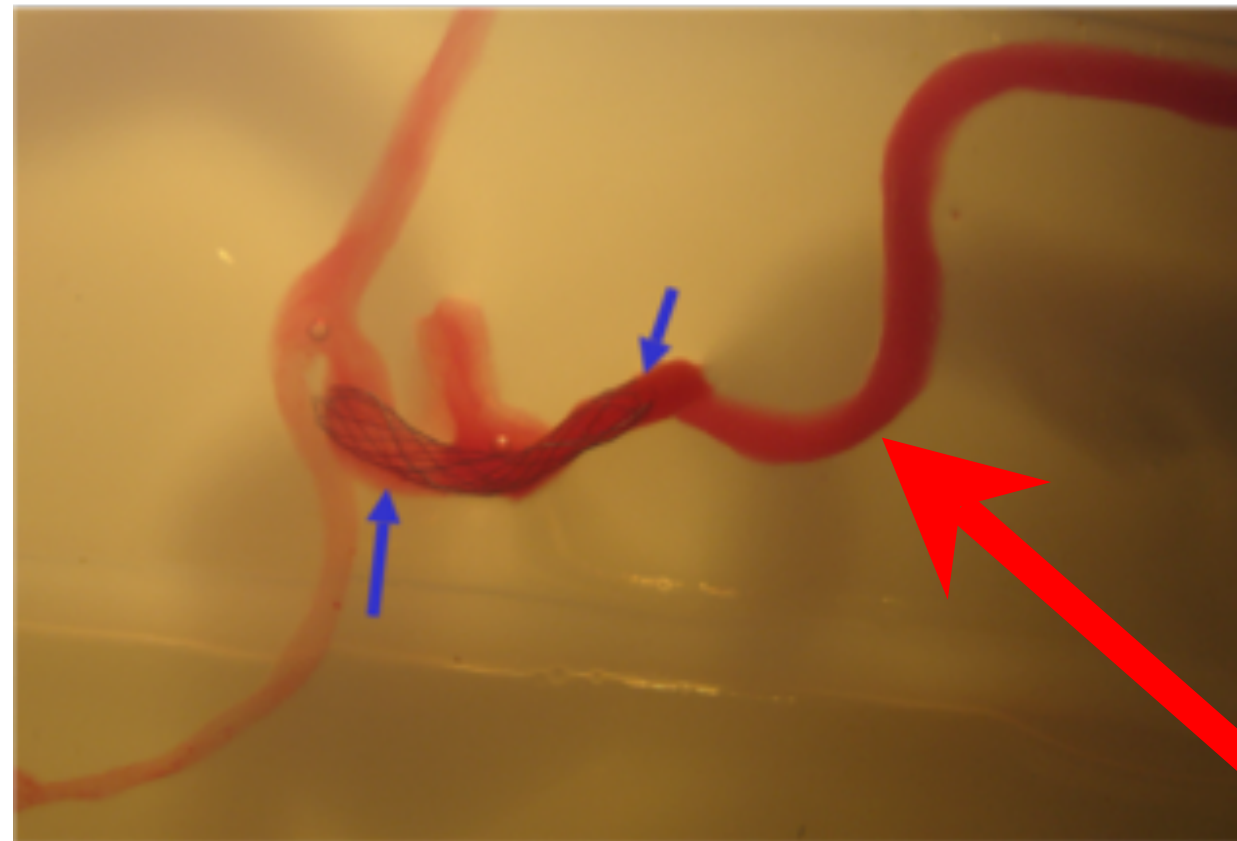
Bone screw torque test

JIS T311

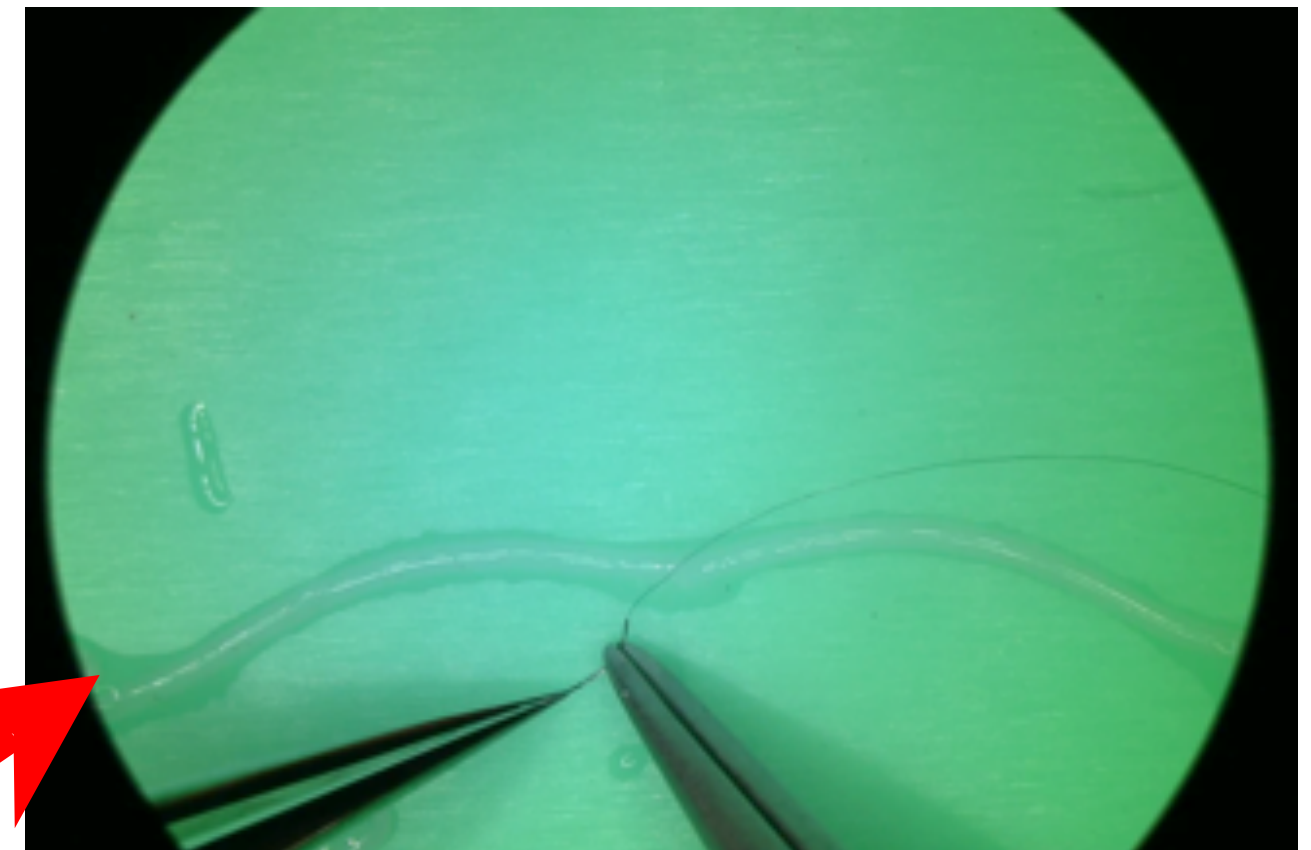


Artificial organs, bone fixation, bone drill, bone saw...

Soft tissue model to evaluate medical devices

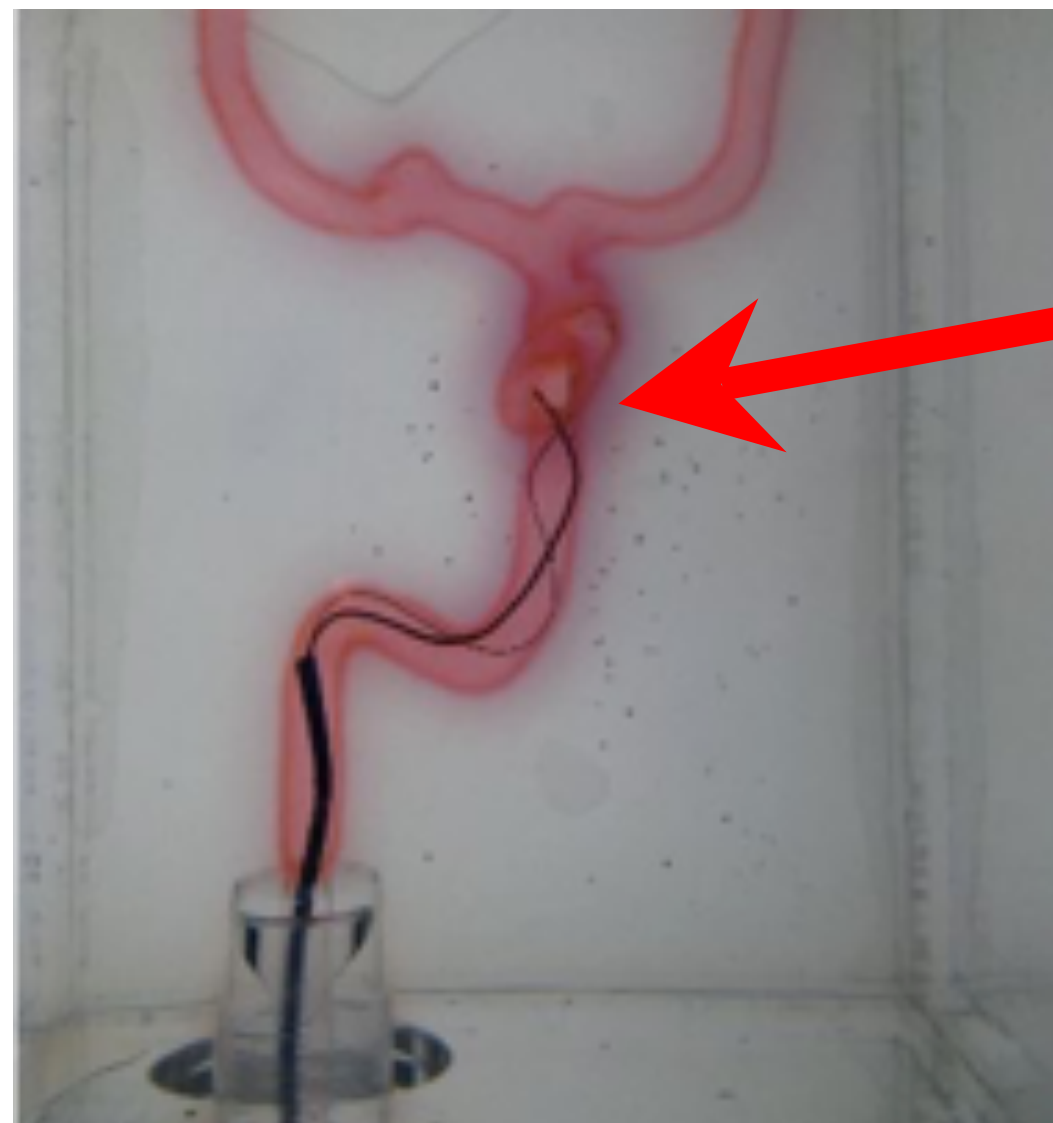


Stent



Suture

Artery model



Catheter

Artificial valve

Coil

Artificial heart

...

Organ models affect many fields.



Evaluation of medical devices

evaluation of robot surgery



preoperative procedure rehearsal

Skill evaluation and education for operation

informed consent

Organ's model



Standardization of organ model based on V and V

Until now: each model for each medical device (and few..)

3D printing can make many models

From now: Establish a concept of model to maintain the quality of medical device

1. Establishment of Biofidelity
2. Establishment of V and V
3. Evaluation axis and the axis range

Thank you for your kind attentions

Any questions?