Aneurisma Basilar recanalizado-TTO-Stent en Y + Coils.

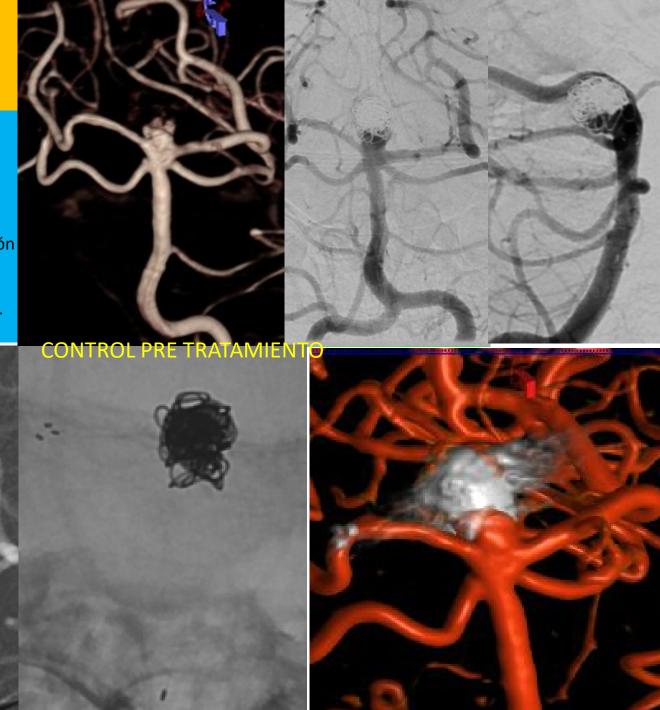
Antecedente de HSA.

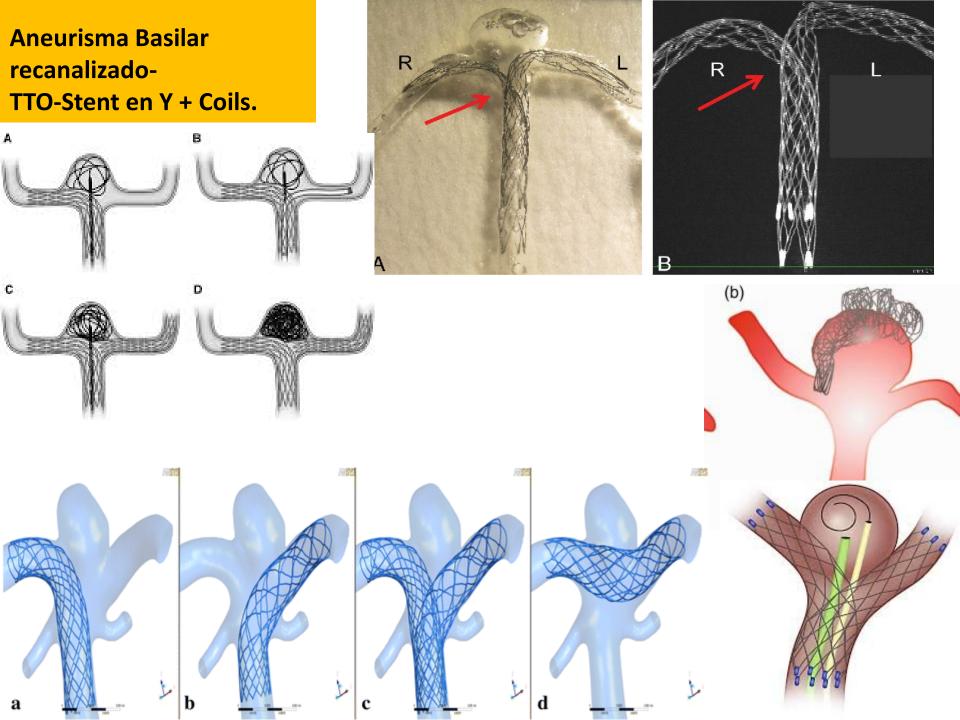
Aneurisma embolizado con coils en agudo.

Recanalización, Tto con 1 stent-coils. Progresión de la recanalización.

Tto definitivo Stent Y con embolización con coils.

Coils GDC-stent celda abierta (Atlas) junto a stent celda cerrada (solitaire).





Aneurisma Basilar recanalizado-TTO-Stent en Y + Coils.

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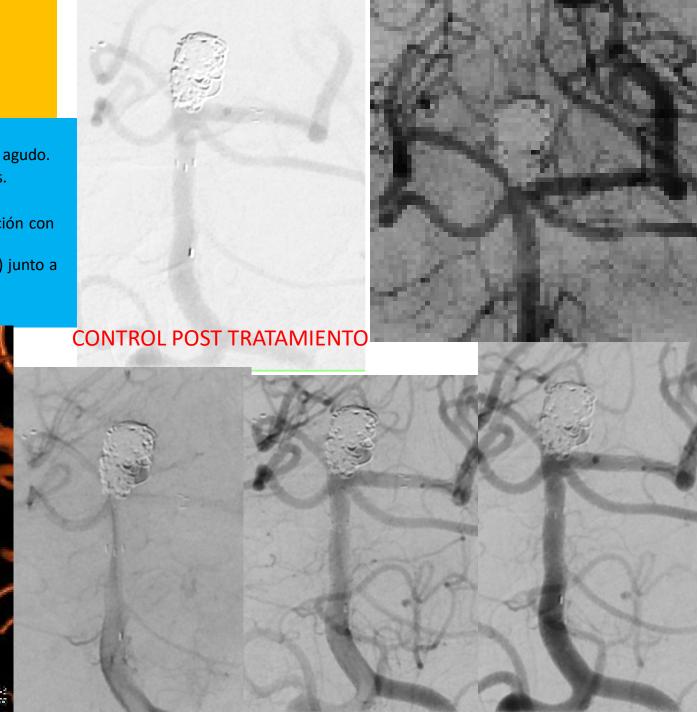
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CONTROL POST TRATAMIENTO



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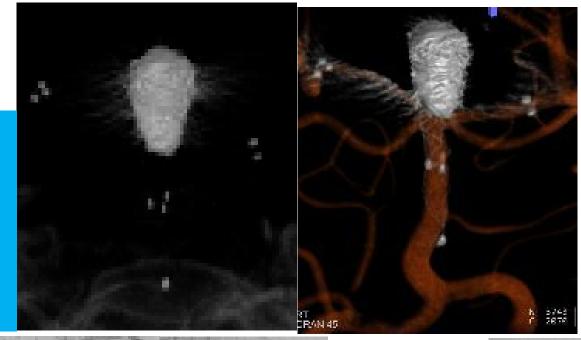
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CONTROL POST TRATAMIENTO





Hemodynamics of 8 Different Configurations of Stenting for Bifurcation Aneurysms

K. Kono and T. Terada



ABSTRACT

BACKGROUND AND PURPOSE: SACE is performed for complex aneurysms. There are several configurations of stent placement for bifurcation aneurysms. We investigated hemodynamics among 8 different configurations of stent placement, which may relate to the recanalization rate.

MATERIALS AND METHODS: We created a silicone block model of a patient-specific asymmetric bifurcation aneurysm. Enterprise closed-cell stents were deployed in the model as various configurations. 3D images of these stents were obtained by micro-CT. We performed CFD simulations for a no-stent model and 8 stent models: a single stent from a proximal vessel to a right or left distal vessel, a horizontal stent, a kissing-Y stent with a uniformly narrowed structure, a nonoverlapping-Y stent, a virtual-Y stent with no narrowed structure (fusion of 2 single stents), and 2 different crossing-Y stents with a focally narrowed structure. Hemodynamic parameters were evaluated.

RESULTS: Cycle-averaged velocity and WSS in the aneurysm were reduced because of stent placement in the following order: single stent (19% reduction in cycle-averaged velocity) < nonoverlapping-Y stent (29%) < virtual-Y stent (32%) < horizontal stent (39%) < kissing-Y stent (48%) < crossing-Y stent (54%). Kissing- and crossing-Y stents redirected impingement flow into the distal vessels because of lowered porosity of stents due to narrowed structures.

CONCLUSIONS: Among 8 different configurations of stent placement, kissing- and crossing-Y stents showed the strongest reduction in flow velocity in the aneurysm because of lowered porosity of stents and redirection of impingement flow. This may be a desirable reconstruction of flow hemodynamics and may decrease recanalization rates in SACE.