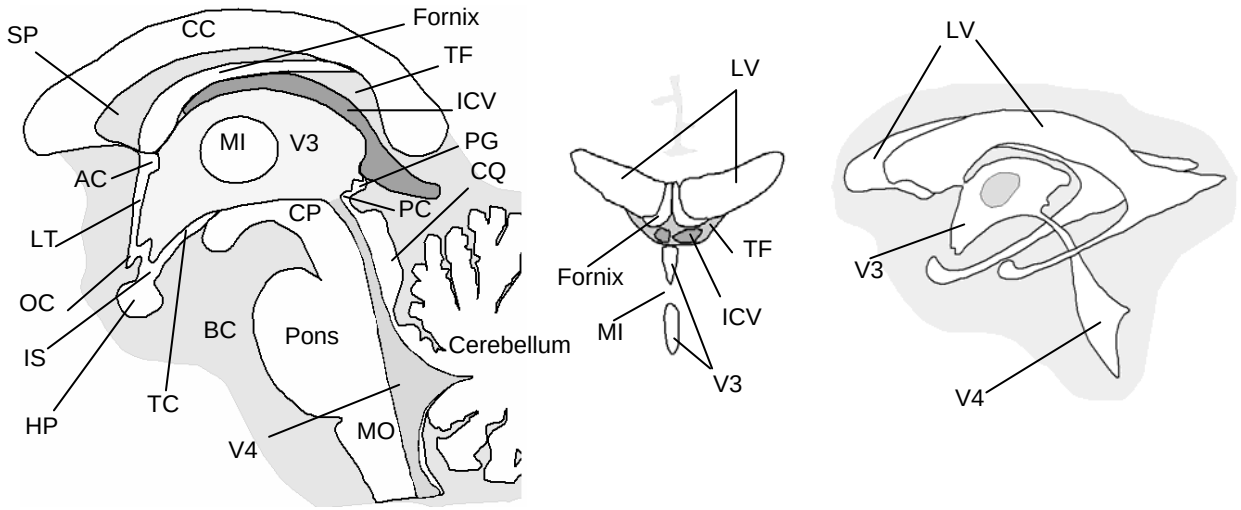

SP
CC
Fornix
TF
ICV
MI
V3
PG
AC
CQ
PC
CP
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OC
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Pons
Cerebellum
IS
TC
HP
V4
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LV
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Fornix
ICV
MI
V3
LV
V3
V4

(a) (b) (c)

Fig. 1

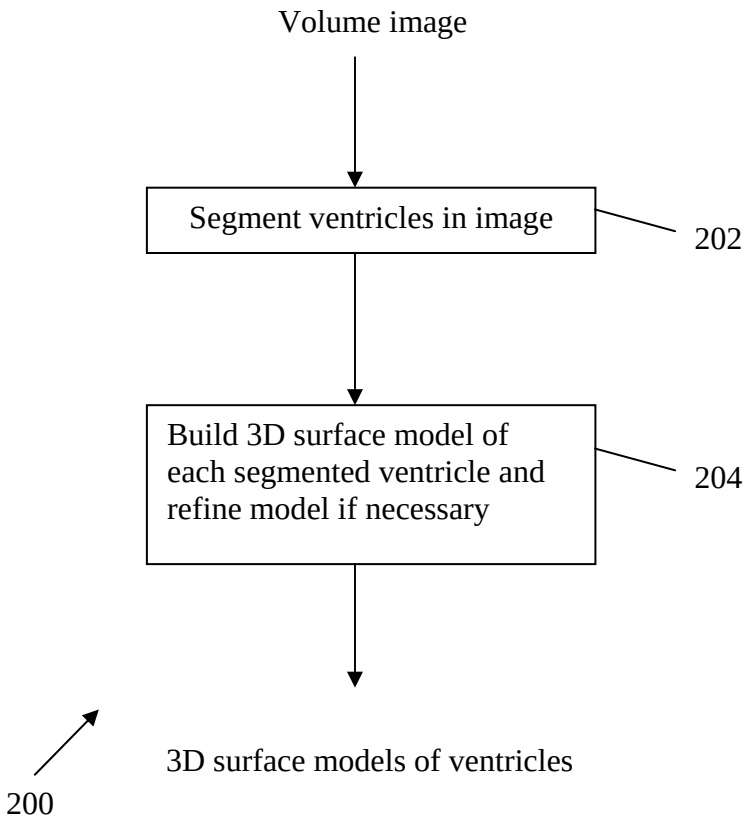
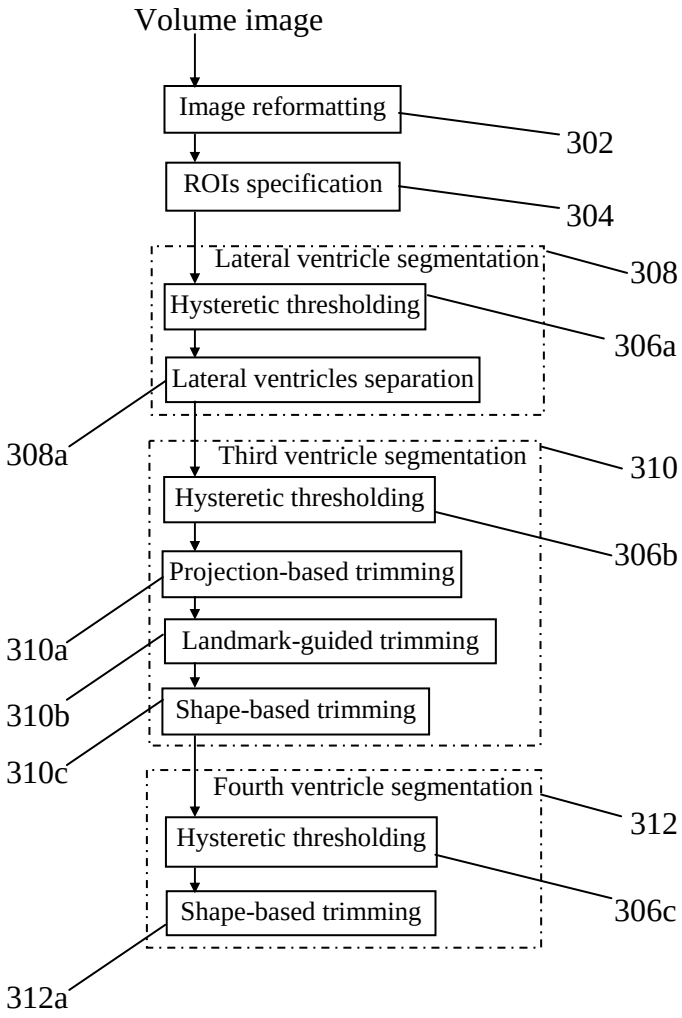

Volume image
Segment ventricles in image
202
Build 3D surface model of each segmented ventricle and refine model if necessary
204
3D surface models of ventricles
200

Fig. 2



202

Volume image with segmented ventricle regions

Fig. 3

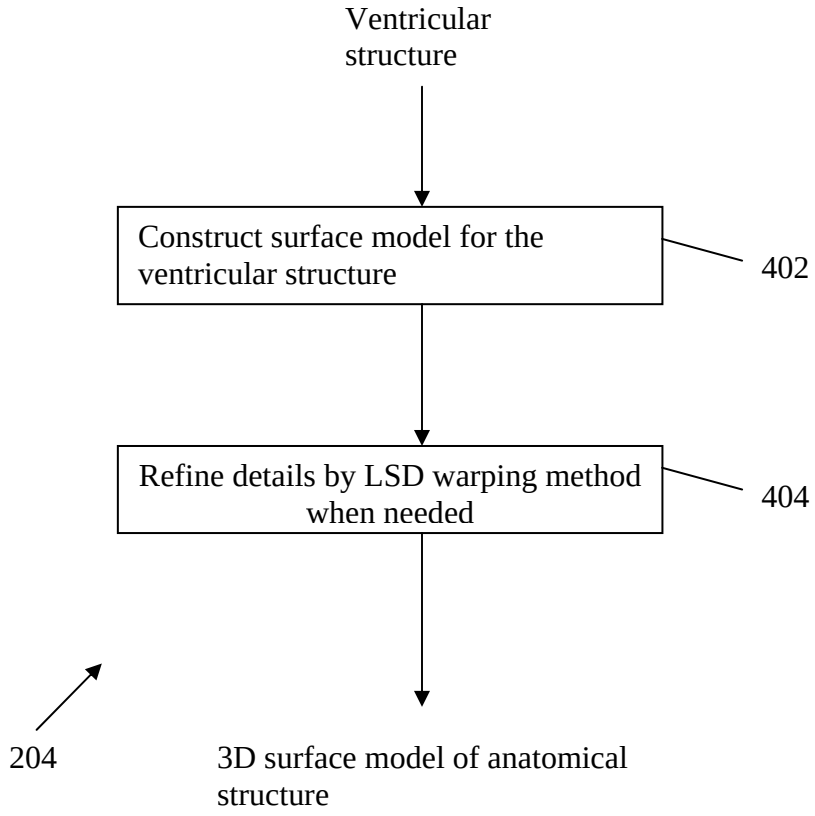

Ventricular structure
Construct surface model for the ventricular structure
402
Refine details by LSD warping method when needed
404
204
3D surface model of anatomical structure

Fig. 4

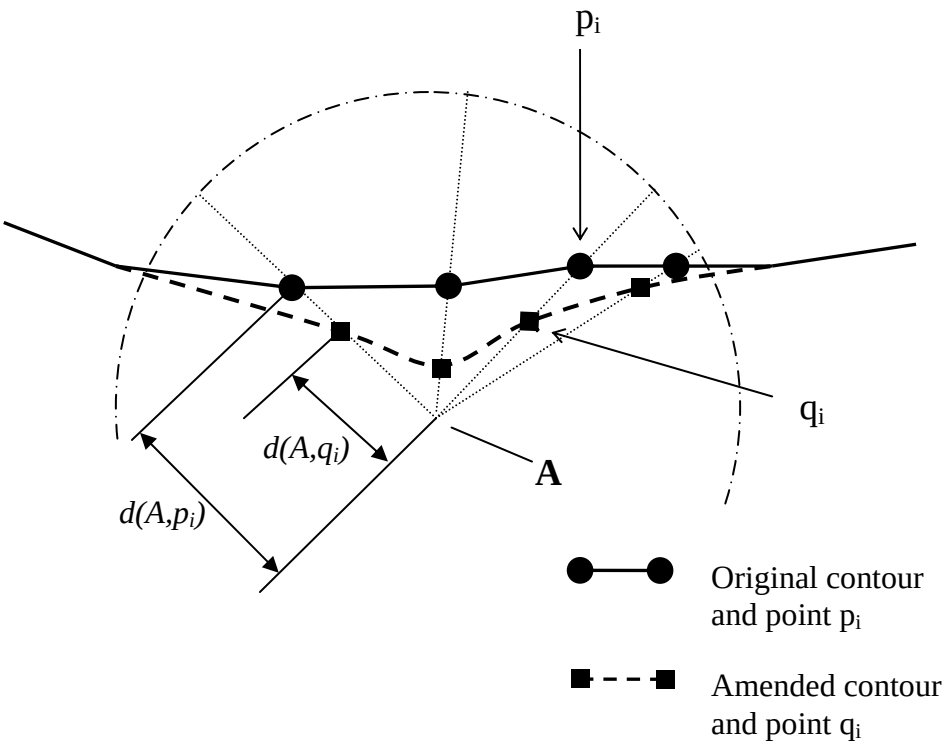

p_i
q_i
$d(A,q_i)$
$d(A,p_i)$
A
Original contour and point p_i
Amended contour and point q_i

Fig. 5

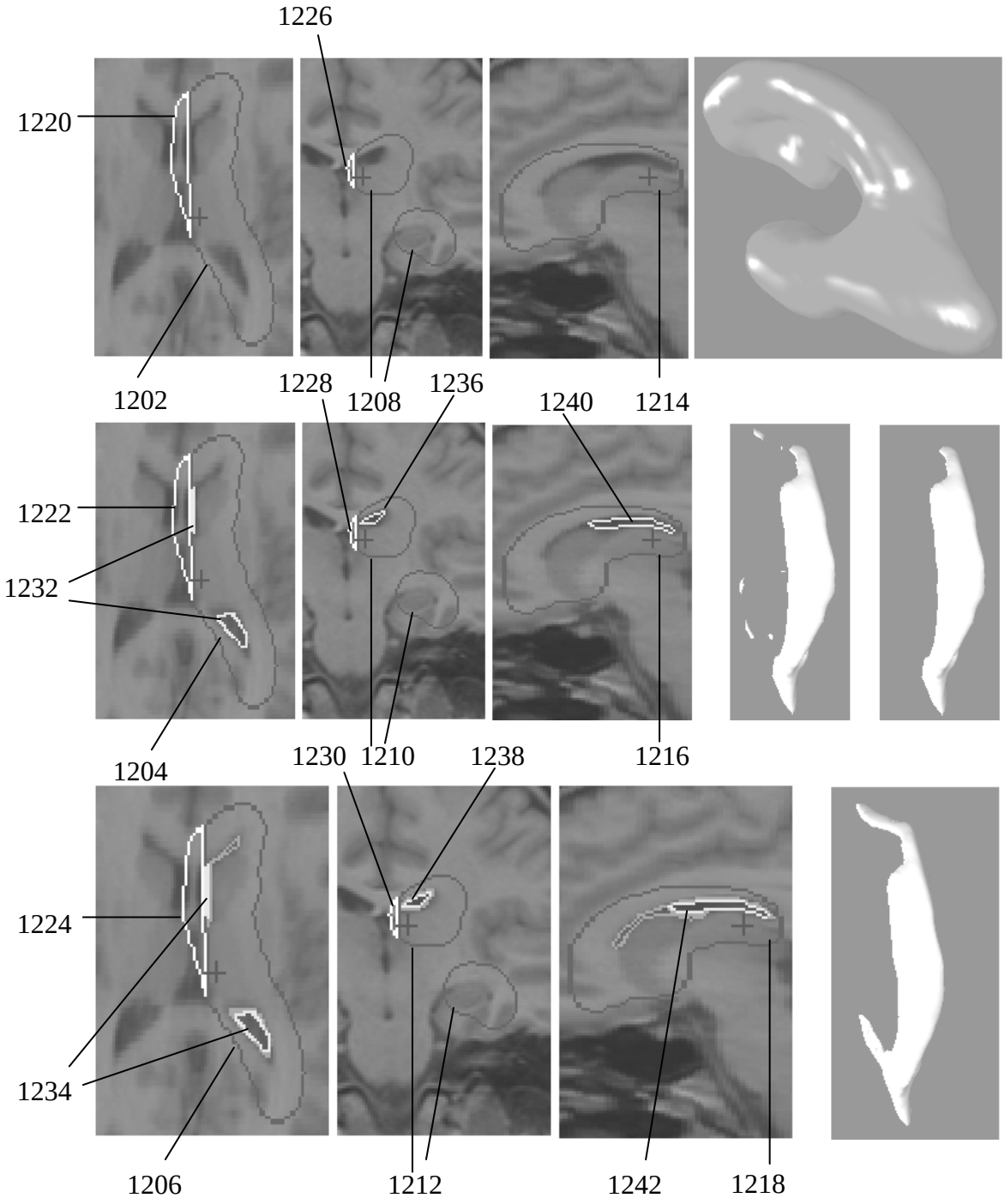

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Fig. 6

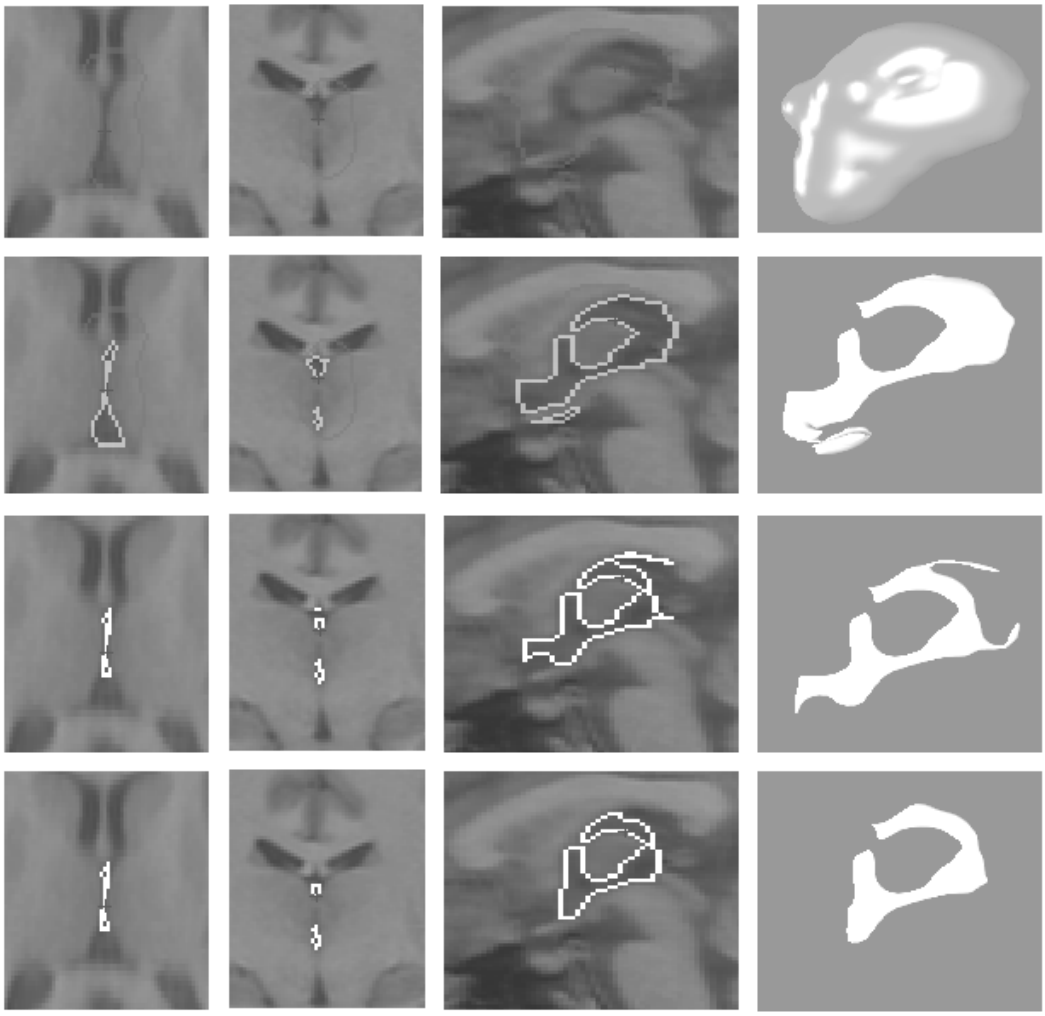


Fig. 7

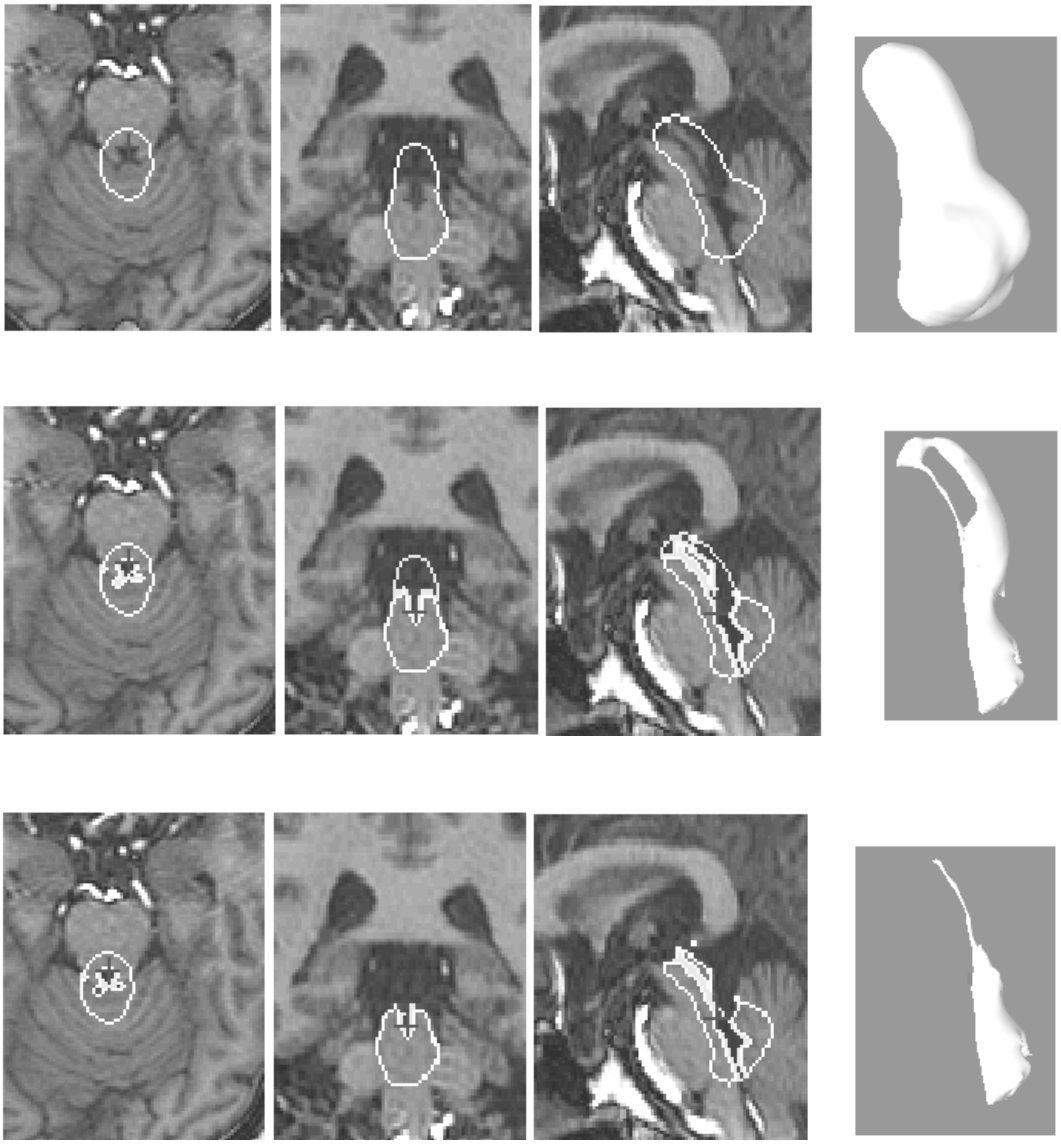


Fig. 8

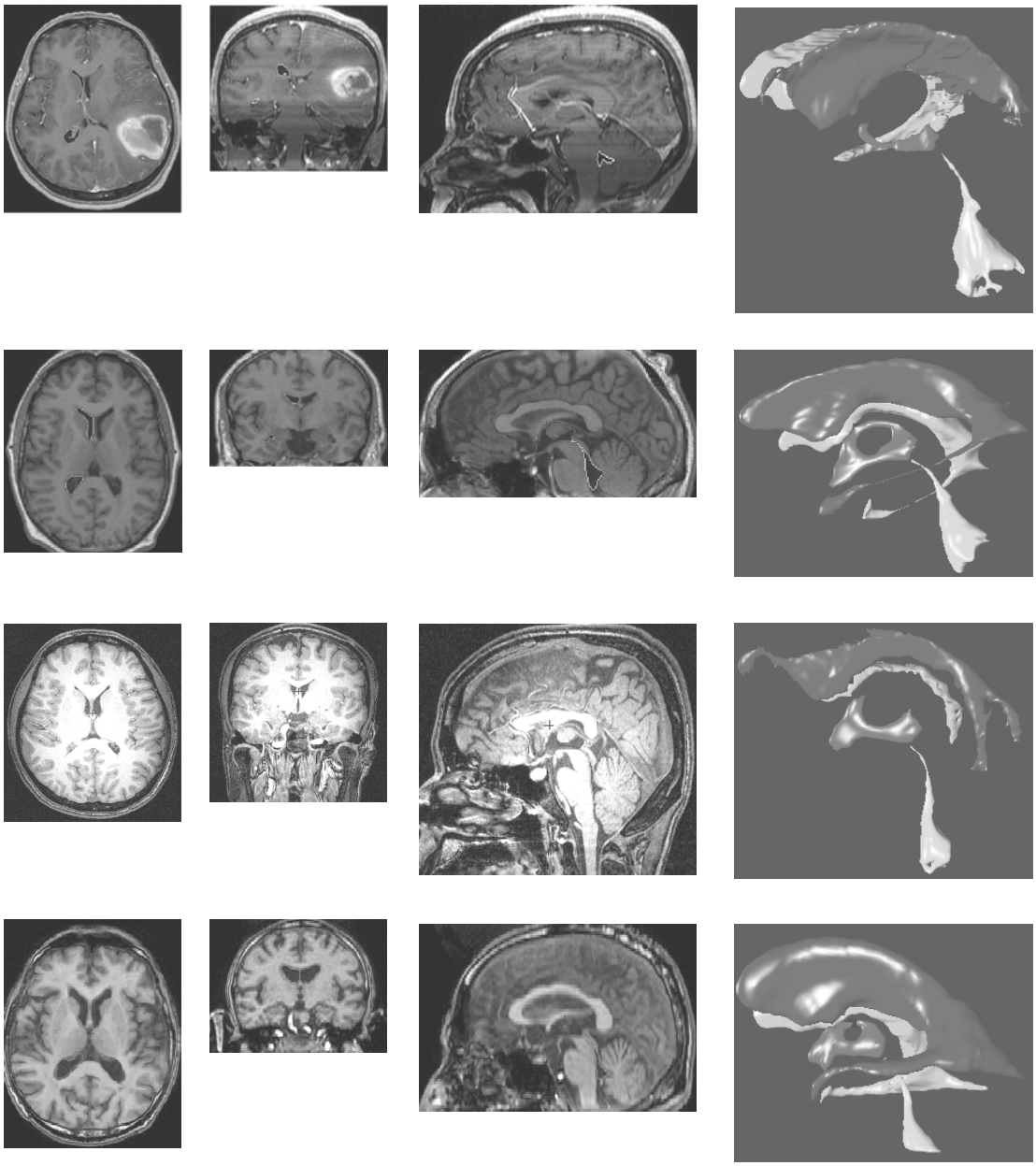


Fig. 9