

Supporting Information

An Anticoagulant/Hemostatic Indwelling Needle for Oral Glucose

Tolerance Test

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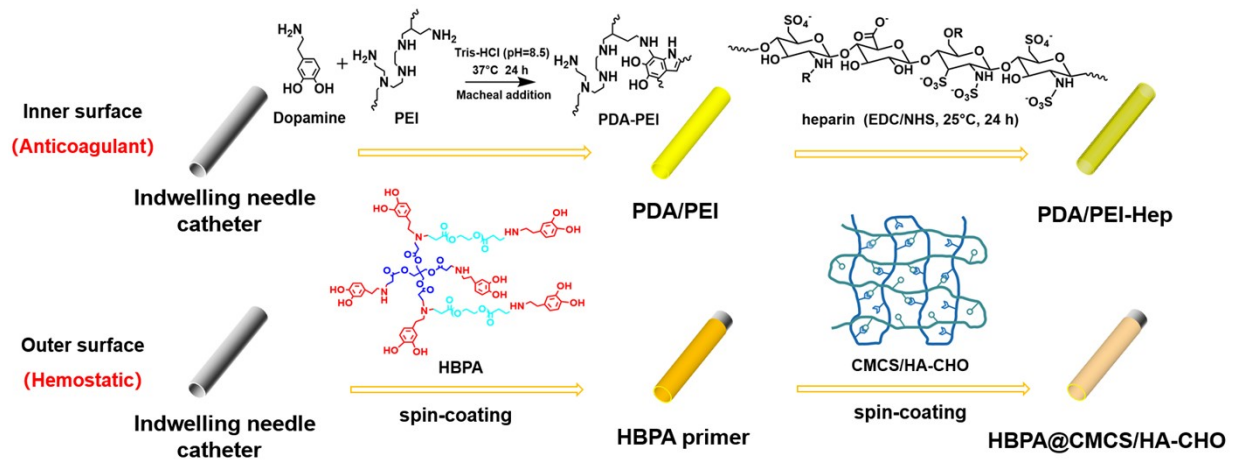


Fig. S1 Illustration of the preparation process of PDA/PEI-Hep & HBPA@CMCS/HA-CHO-coated indwelling needle.

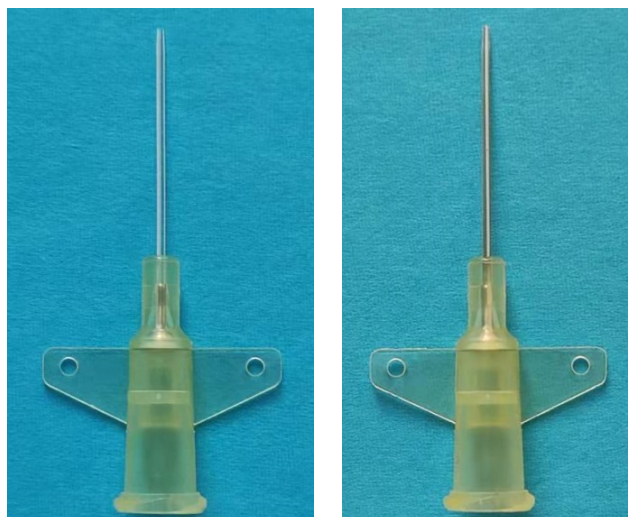


Fig. S2 Digital photos of bare indwelling needles (left) and PDA/PEI-coated indwelling needles (right).

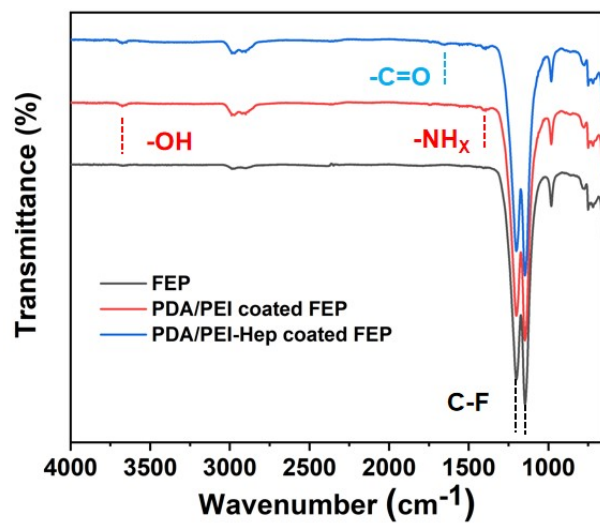


Fig. S3 ATR-FTIR spectra of FEP, PDA/PEI-coated FEP and PDA/PEI-Hep-coated FEP.

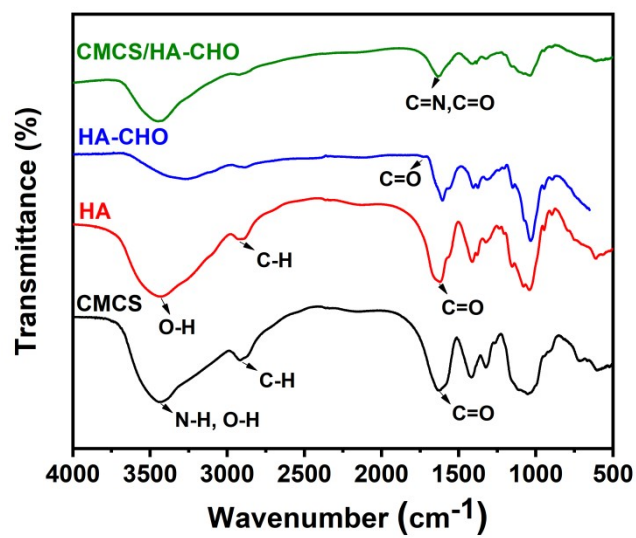


Fig. S4 FTIR spectra of CMCS, HA, HA-CHO and CMCS/HA-CHO.



Fig. S5 Static water contact angle of HBPA-coated FEP.

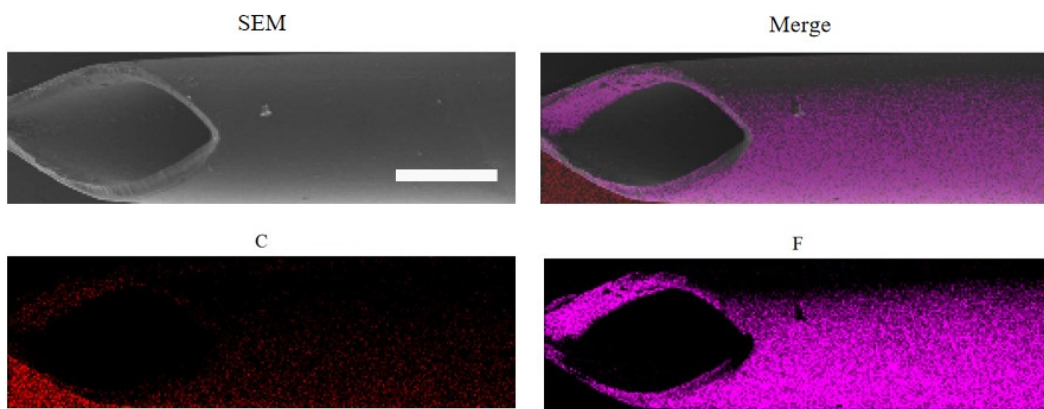


Fig. S6 SEM images and EDS analysis of bare indwelling needle. Scale bar: 500 μm .

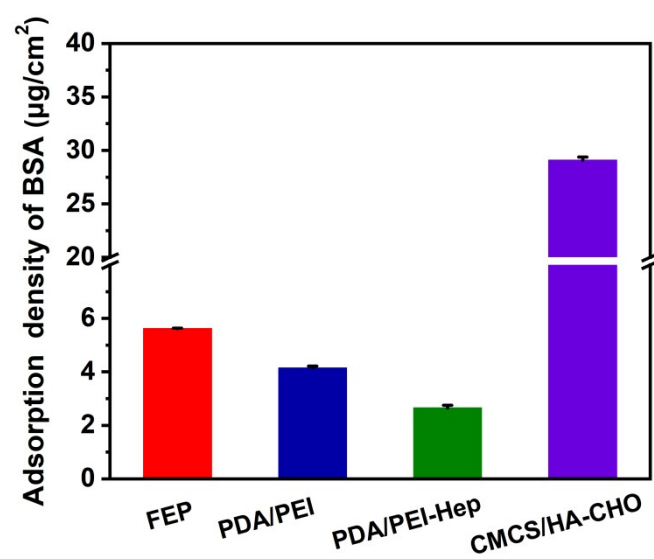


Fig. S7 Adsorption density of BSA on FEP, PDA/PEI-coated FEP, PDA/PEI-Hep-coated FEP and CMCS/HA-CHO by quantitative measurement with Micro BCA Protein Quantitation Kit.

Mov. S1 Bare indwelling needle was implanted into the rabbit ear vein and clotted after 30 min.

Mov. S2 PDA/PEI-Hep & HBPA@CMCS/HA-CHO-coated indwelling needle was implanted in the rabbit ear vein and blood could be continuously drawn for 4 times at 0, 1, 2 and 3 h time points.

Mov. S3 Bleeding was observed when the bare indwelling needle was withdrawn from the rabbit ear vein.

Mov. S4 Hemostatic effect was shown when the PDA/PEI-Hep & HBPA@CMCS/HA-CHO-coated indwelling needle was withdrawn from the rabbit ear vein after 3 h of implantation.

Mov. S5 Modified indwelling needle was used to draw blood from the femoral vein of diabetic rats for 4 times at 0, 1, 2, and 3 h time points.

Mov. S6 Bleeding was observed when the bare indwelling needle was withdrawn from the femoral vein of normal rats.

Mov. S7 Hemostatic effect was shown when the PDA/PEI-Hep & HBPA@CMCS/HA-CHO-coated indwelling needle was withdrawn from the femoral vein of normal rats after 3 h of implantation.