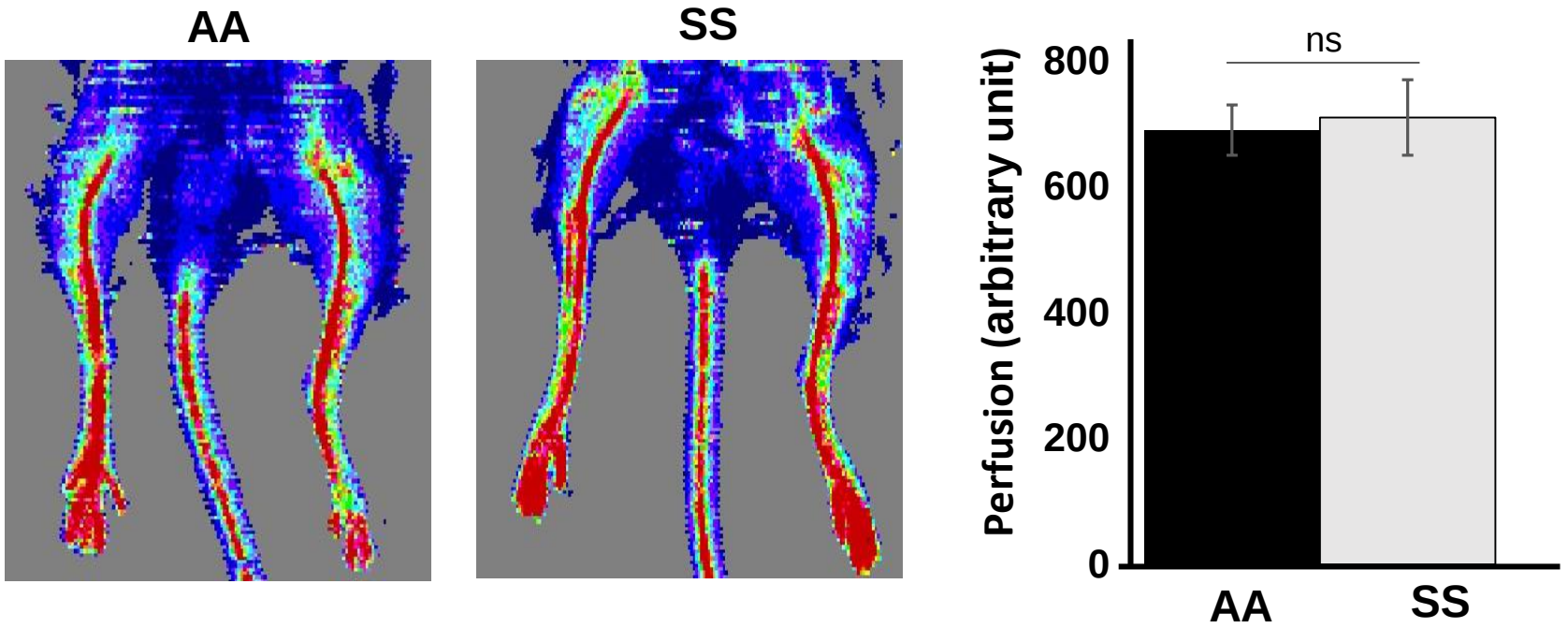
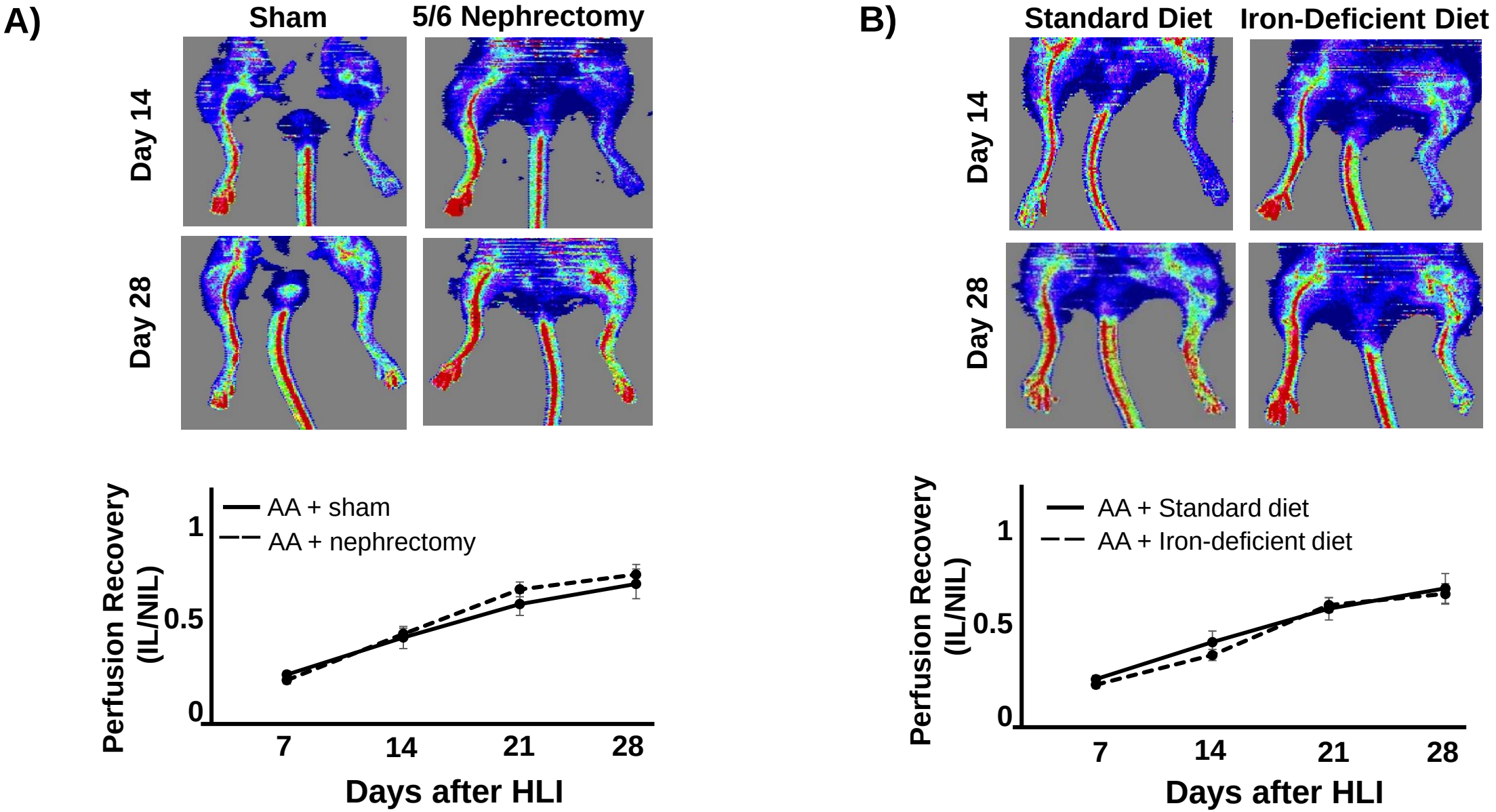
Supplemental Table I: Blood counts in AA, SS and 5/6 nephrectomized mice

	AA Sham	5/6 Nephrectomy	SS
WBC (10^3/µl)	7.9 ± 2.2	10.14 ±1.9	14.9 ± 3.2***
Lymphocyte (10^3/µl)	8 ± 1.1	11.2 ±1.95	12 ± 4.2**
Monocyte (10^3/µl)	0.4 + 0.08	0.94 ± 0.1*	1.2 ± 0.04
Granulocyte (10^3/µl)	0.8 ± 0.04	1.24 ± .0.07*	1.5 ± 0.04***
Hematocrit (%)	40.4 ± 2	25.7 ± 1.3***	28.7 ± 1.3***
Hemoglobin (g/dl)	14.5 ± 0.42	9.2 ± 0.3***	9.4 ± 0.3***

*P<0.05, **P<0.01, *** P<0.001, compared to AA sham

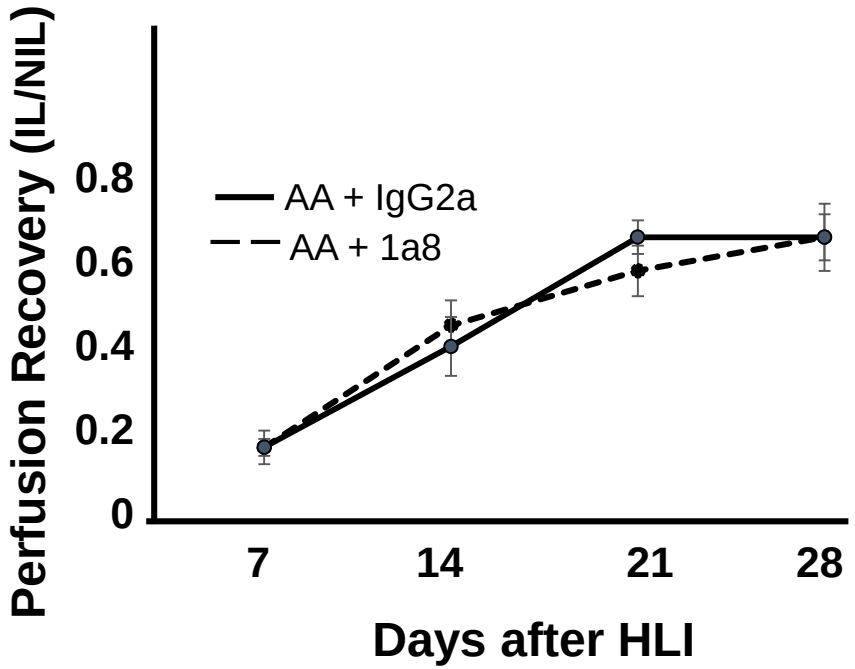


Supplemental Figure I: Representative LDPI showing no difference in baseline perfusion between SS and AA mice. N= 10 mice per group. Bars are mean ± S.E.M. *ns* indicates not significant.

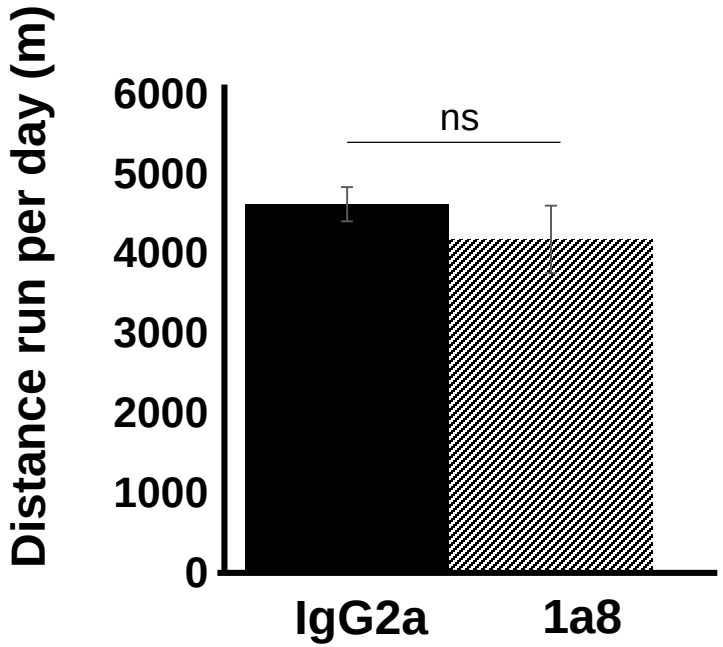


Supplemental Figure II: Anemia does not impair collateral formation in AA mice**. A**) Representative LDPI and perfusion quantitation of AA mice (sham vs nephrectomy showed no impairment in perfusion after HLI. B) Representative LDPI perfusion quantitation showed no impairment in collateral formation between iron=deficiency anemia and non-anemic mice after HLI. N=5 mice per group

A)

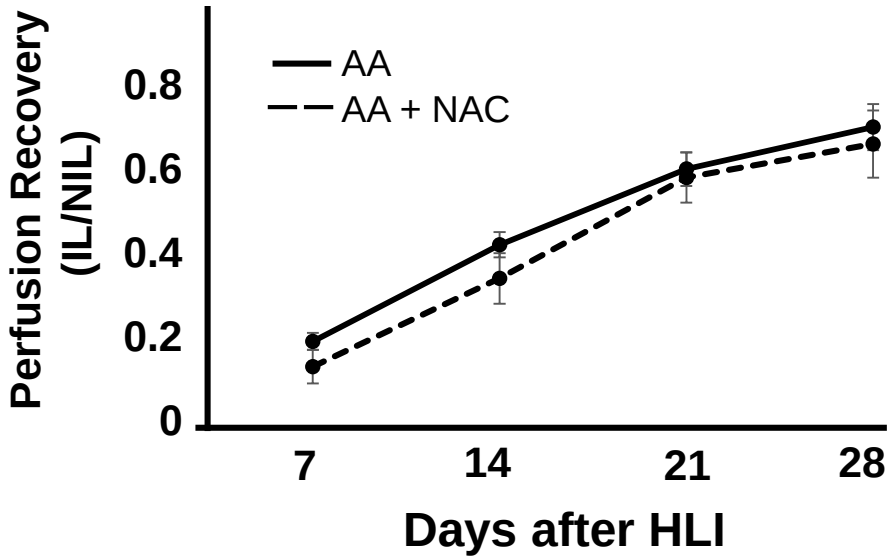


B)

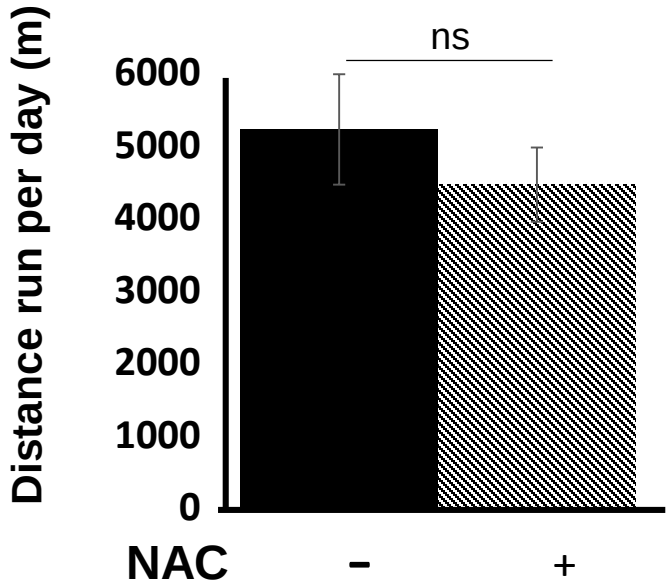


Supplemental Figure III: Effect of neutrophil depletion on collateral vessel formation and functional recovery in AA mice. **A**) Weekly perfusion measurement by LDPI is shown. **B**) Average distance run per day on computerized running wheel is shown. N=5 mice per group. Bars are mean ± S.E.M. *ns* indicates not significant.

A)



B)



Supplemental Figure IV: Effect of anti-oxidant therapy on collateral vessel formation and functional recovery in AA mice after ischemia. A cohort of AA mice were treated with NAC in their drinking water. (**A**) Weekly perfusion measurement by LDPI showed no improvement in perfusion recovery in AA mice receiving NAC therapy. (**B**) Average distance on computerized running on day 28 after HLI also showed no improved spontaneous muscle function in AA mice treated with NAC before and during the course of recovery from HLI. N=5 mice per group. Bars are mean ± S.E.M. *ns* indicates not significant.

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