The correct answer is \*\*(A) Histogram I.\*\*

Here's the reasoning, presented with graduate-level statistical rigor:

\* \*\*Understanding the Context:\*\* We're dealing with wrist circumferences, a continuous variable, measured from a biological population (newborn female infants). We can anticipate that wrist circumferences would likely be normally distributed, or at least approximately normal, due to biological factors and the Central Limit Theorem.

\* \*\*Evaluating Histograms:\*\*

\* \*\*(I) Histogram I:\*\* This histogram exhibits an approximately symmetrical, bell-shaped distribution, characteristic of a normal distribution. It's centered, with a single mode, and tapers off on both sides. This is a plausible representation of wrist circumference data.

\* \*\*(II) Histogram II:\*\* This histogram is severely right-skewed. This suggests that the population would have values very concentrated towards the lower end of the wrist circumference and a long tail on the right. This would not be expected with a biological variable like this.

\* \*\*(III) Histogram III:\*\* This histogram is also right-skewed and very non-symmetrical. This is not what we would expect from a measure like this.

\* \*\*(IV) Histogram IV:\*\* This histogram has a more uniform distribution. Uniform distributions are not typical of biological measurements.

\* \*\*Conclusion:\*\* Given the nature of the variable (wrist circumference), a symmetric, bell-shaped distribution (like Histogram I) is the most reasonable expectation. Other distributions are less likely given biological constraints.