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VALIDATION OF THE OPTICAL AKTIIA BRACELET IN DIFFERENT BODY POSITIONS

STUDY PURPOSE

The main objective of the study was to demonstrate the accuracy and precision of BP values estimated by the Aktiia Bracelet when compared to BP readings obtained by manual double auscultation in the most common body positions of daily life.

STUDY POPULATION

n= 91

study participants

43/43

male/female

21-65 (38)

Age: Range (Mean)

RESULTS

Systolic BP
(Mean ± Std)

Diastolic BP
(Mean ± Std)

0.46 ± 7.75 mmHg

Sitting position (wrist at heart level)

0.39 ± 6.86 mmHg

Sitting position (wrist at heart level)

- 3.02 ± 6.10 mmHg

Sitting position (wrist on lap)

- 4.22 ± 6.56 mmHg

Sitting position (wrist on lap)

- 2.44 ± 10.15 mmHg

Lying position

- 1.93 ± 7.65 mmHg

Lying position

- 0.62 ± 12.51 mmHg

Standing position

- 4.85 ± 9.11 mmHg

Standing position

- 1.11 ± 9.85 mmHg

All positions

- 1.32 ± 7.56 mmHg

All positions

CONCLUSION

Aktiia can accurately estimate BP in the most common body positions compared to auscultation.