

Re: Taking Blood p Thru Shirt Question ?

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Robert11 wrote:

Hello,

When taking blood p with one of those automatic arm cuff pump inflators monitor, would one expect any meaningful differences between placing the cuff on the bare arm vs thru a long sleeve (usually an oxford) shirt ?

I realize the bare arm is undoubtedly best, but any "real" difference ?

Thanks,
Bob

This has actually been studied:

Fam Pract. 2003 Dec;20(6):730-2. Comparison of blood pressure measurements on the bare arm, below a rolled-up sleeve, or over a sleeve. Kahan E, Yaphe J, Knaani-Levinz H, Weingarten MA.

BACKGROUND: This study examined the effect of measuring blood pressure below subjects' rolled-up sleeves, over the sleeve, or on the bare arm. This is an important day-to-day issue for the busy GP.
METHODS: The sample consisted of 201 subjects in family practice clinics and residents of a senior citizens' home. A digital device was used in all cases. Each participant underwent three blood pressure measurements in each of the following conditions in random order: cuff on bare arm; cuff over the sleeve; and cuff below the rolled-up sleeve. Differences between measurements were plotted against the mean blood pressure. Confounding factors controlled for were age, sex, clothing pressure and skin-fold thickness. **RESULTS:** Differences in mean blood pressure readings between the clothed and bare arm were 0.5 mmHg (SD 7.5) for systolic pressure and 1 mmHg (SD 5) for diastolic pressure; neither difference was significant. However, in hypertensive subjects (>140 mmHg systolic), although the mean difference remained small (systolic pressure, 2 mmHg, SD 10), the range of difference for individual subjects was -32 mmHg to +22 mmHg.
CONCLUSION: The degree of clothing under the sphygmomanometer cuff does not have a clinically important effect on the blood pressure measurement. In patients known or found to be hypertensive, measurement on the bare arm is recommended.

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