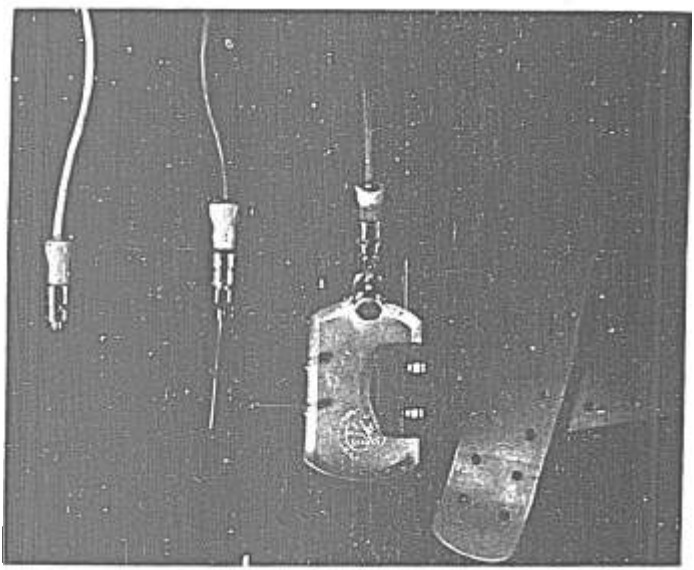
Needle Adaptors for ECG Monitoring Machines

Dr. William F. Brehm, of Sayre, Pennsylvania, believes that the maintenance of good skin contact of plate electrodes of monitoring devices is at times difficult. In long operations the electrolyte paste dries and resistance of the skin increases; displacement is common. Direct subcutaneous contact is more efficient, but the needles for this purpose must be adapted to the tips of wires by special and expensive adaptors now available. Sometimes these adaptors need special needles, which is inconvenient.



Simple and inexpensive method of adapting the tips of electrocardiographic lead wires for both needle electrodes and plate electrodes.

The illustration shows a simple and inexpensive method of adapting the tips of electrocardiographic lead wires for both needle electrodes and plate electrodes. The tips of broken B-D Leur-Lok syringes are removed from the glass barrel by twisting after a slight warming of the metal to expand it. The binding post tip or bare wire is soldered into the Leur-Lok tip. The wire and Leur-Lok tip are taped then with plastic tape to add stability and prevent breakage of the wire from bending. Plastic or rubber sleeves available in most electrical supply stores can be used instead of tape.

A 22 or 23 gauge needle is used for the indwelling electrode. If a plate and strap application is desired, a short, heavy caliber needle is applied to the Leur-Lok tip and inserted into the binding post of the plate electrodes as illustrated.