we would like to describe a new device
we have developed to facilitate the
use of the combined spinal-epidural
approach for regional anesthesia.
An epidural needle 18G in brazed with
silver alloy to a spinal needle 20G,
as described in the illustration.
The two needles make a combined
spinal-epidural needle (CSEN).
They are of stainless steel.
It gives the ability to perform
injections to the two compartments
(epidural and spinal) without
curving the spinal needle by
introducing it through the epidural
needle with the danger of breaking
its tip.
After finding the epidural space with
the CSEN, an epidural catheter is
introduced through it to the desired
level. Then the obturator from the
spinal needle is taken off, and a
small-sized spinal needle 29-32G
is introduced through it and its tip
punctures straightly the dura and
enters the spinal space.
An injection of the anesthetic solution
is made then into the spinal space.

Then the small-sized spinal needle is
taken off, and the CSEN is withdrawn
carefully leaving the epidural catheter
in place.
CSEN is a novel device in the operating
room. It has not the danger of breaking
the spinal needle tip when it crosses the
epidural needle tip, or of protruding the
epidural catheter through the hole in the
dura made previously by the spinal needle.
It can also lower significantly the
occurrence of post-spinal headaches
because it allows the use of very small-
sized spinal needles.