the tuberculous focus was probably small and confined, so that the remaining healthy portion probably underwent compensatory hypertrophy.

COMPARISON OF PHTHALEIN EXCRETION WITH AUTOPSY FINDINGS

An opportunity was afforded in twenty-one cases (see Table 12) of comparing the phthalein excretion with the pathological condition of the kidneys at autopsy.

In the cases in which the phthalein excretion was moderately decreased the kidneys showed moderate pathological changes. In those cases in which no phthalein was excreted, or only a small amount, extensive and severe renal destruction was invariably found.

In one heart case (No. 14, Table 12) showing an excretion of 43.5 per cent. for two hours, which is a definite but moderate reduction, only a passive congestion was found. That this condition can interfere with function other clinical cases seem to confirm.

In one case double polycystic kidneys were encountered, although the phthalein excretion was normal. The patient exhibited no symptoms from this condition during life, death being due to pneumonia. The fact that polycystic kidneys may be present for a great many years without symptoms and also that they are usually unexpectedly discovered at autopsy in patients dying from other conditions is good proof of their functional efficiency.

CONCLUSIONS

1. The absorption of phenolsulphonephthalein following injection into the lumbar muscles is better than the absorption from the gluteal injection, while the latter is superior to subcutaneous injection

2. Administration into the lumbar muscles is the method of choice.

3. Experimentally those diuretics that stimulate the renal cells to increased activity cause some increased secretion of phenolsulphonephthalein, while those that act mechanically produce no increased secretion. Clinically diuretics do not influence the phthalein output.

4. Experimental evidence seems to indicate that phenolsulphonephthalein is excreted mostly by the tubules but probably also to a slight extent by the glomeruli.

5. The renal cells display a striking specificity in the excretion of phenolsulphonephthalein.

6. The phenolsulphonephthalein as used by us has many advantages over all other functional tests so far proposed.

7. It is better adapted for use as a functional test than any other drug previously employed for the same purpose, on account of its early appearance in the urine and the rapidity and completeness of its elimination by the kidney and the reliance to be placed on its findings.