

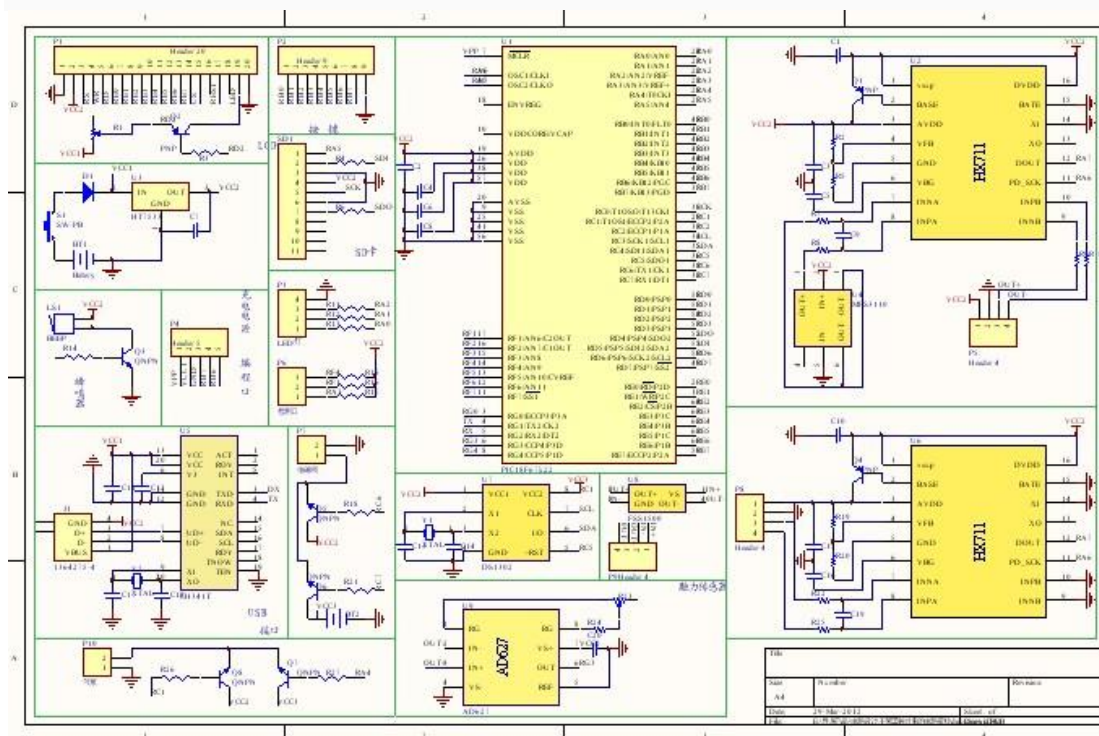
THE CATHETERIZATION APPARATUS WITH BIONIC BLADDER

Hypothesis / aims of study

After spinal cord injury, many complications of neurogenic bladder dysfunction, such as UTI, calculus, hydronephrosis and renal failure may occur. Most of them were urinary retention, and the Conventional methods was bladder indwelling catheter. However, as the abdominal pressure increased, urine reverse flow into the renal pelvis considering of the closing catheter. That will lead to bacterial infections and effect patients recover.

Most of the catheterization apparatus were focus on transferring pressure signal to switch control units. The units give an alarm or begin urination. These apparatuses can simulate normal bladder physiologic micturition, but urine flow rate and bladder function test can not be tested.

Our catheterization apparatus with bionic bladder can dispose the rising bladder pressure, which was caused by body position change, cough, sneeze and urinary bladder spasm, etc. Specially, urodynamics parameters such as UFR benefit to recovery.



Picture 1 Product diagram

Study design, materials and methods

Results

Interpretation of results

Concluding message

Disclosures

Funding: Our catheterization apparatus with bionic bladder can dispose the rising bladder pressure, which was caused by body position change, cough, sneeze and urinary bladder spasm, etc. Specially, urodynamics parameters such as UFR benefit to recovery. **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** We just show the catheterization apparatus with bionic bladder. **Helsinki:** No **Helsinki not Req'd:** It is the first time that we join the committee. **Informed Consent:** Yes