

Quality Evaluation of S-protector by Endocrine Surgeons in Korea

September – 2016

Wecan Medicare

Summary

Background

There are more than 40,000 cases of Thyroidectomy a year in Korea which is a considerable number in the world.

Most of Korean surgeons didn't use a surgical wound protector although they realized the necessity. Surgeons tried a ring plastic wound protector such as Alexis, SurgiSleeve and similar products.

But, those products were inconvenient to use because a thick ring deepened the surgical cavity and a less flexible ring damaged the incision site when inserted and removed.

Wecan Medicare developed a new surgical wound protector by improving the protective function and resolving the problems of a ring wound protector.

To evaluate the development, Wecan Medicare conducted a quality evaluation at 17 major hospitals and received a test results from 20 endocrine surgeons.

Methods

Endocrine surgeons used S-protectors on Thyroidectomy more than 3 times and checked which factors were improved and how much. They also made comments on the positive results.

Findings

S-protector fulfilled the ideal role of wound protector and support the function of retraction.

19 surgeons gave the highest score on the preference and 1 high score out of 20 test surgeons.

Conclusion

S-protector is strongly recommended by all surgeons for Thyroidectomy

Quality evaluation of S-protector by Endocrine surgeons in Korea: Multi-institutional study

Tested product

S-protector(model: SP-T01) for Thyroid surgery
Applied incision size: 5~6.5 cm

Period

June 1st ~ June 30, 2016

Evaluators

20 Endocrine surgeons from 17 hospitals in Seoul, Gyeonggi-do and a province
To obtain more objective results, we chose leading hospitals in Thyroid surgery

Hospitals

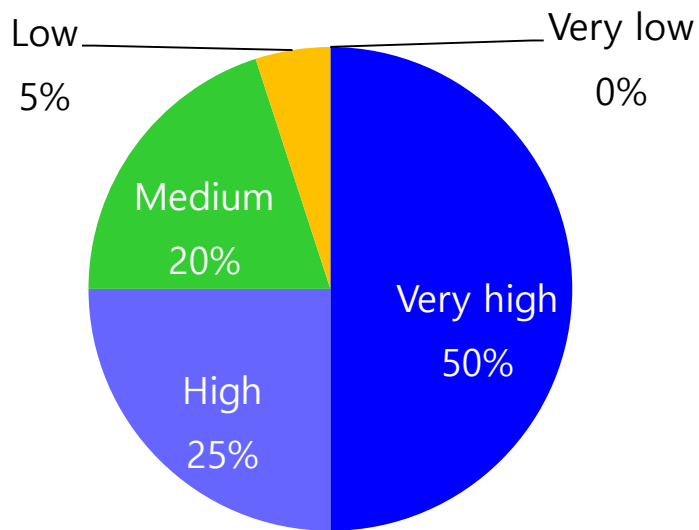
Seoul National University Hospital, Yeonsei Severance Hospital, Samsung Medical Center, Seoul National University Bundang Hospital, Chung-Ang University Hospital, Konkuk University Medical Center, Ewha Womans University Medical Center, Ajou University Hospital, Cha Gangnam Medical Center, e.t.c. (total: 17 hospitals)

Category and Test Items

Category	Test items
Cost saving	It is helpful to reduce surgical assistants
Retraction	It provides a proper surgical space by retraction
Cost saving	It is helpful to save the operation time
Protection	It reduces the exposure of surgical wound to the source of infection or tumor cells
Protection	It can prevent a localized tension to wound which causes a damaged tissue
Protection	It can reduce a stray burn caused by electric/ultrasound energy devices
Protection	It is helpful to reduce a scarring
Protection	It is helpful to reduce a pain of wound after surgery
Adverse event	The use of surgical devices is not disturbed by components of S-protector or limited on the operation
Improvement	S-protector is superior to a ring plastic wound retractor
Preference	I want to use S-protector for Thyroidectomy

Review of test results

Cost saving It is helpful to reduce surgical assistants



Perfection	Results
4.0	3.2
converted to 100	80

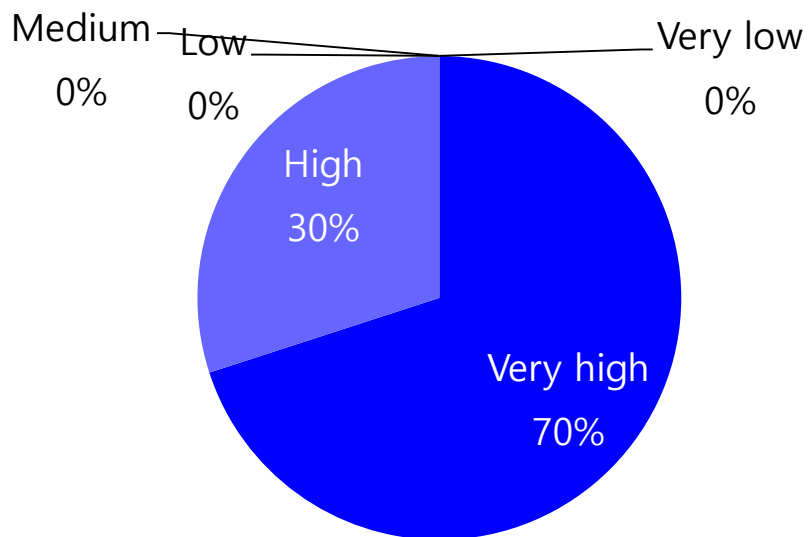
Conclusion

70% answered it helped to reduce a surgical assistant although 20% said no difference.

Review of test results

Retraction

It provides a proper surgical space by retraction



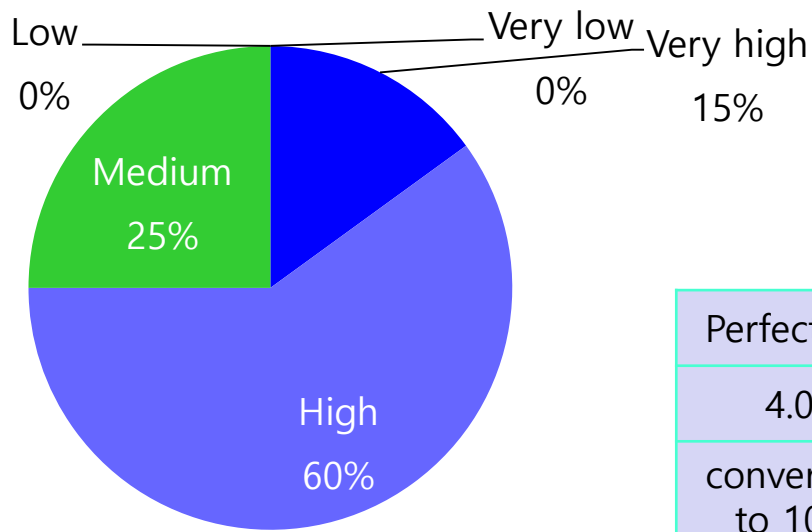
Perfection	Results
4.0	3.7
converted to 100	92.5

Conclusion

70% answered it provided a very high retraction and 30% said a high retraction.

Review of test results

Cost saving It is helpful to save the operation time



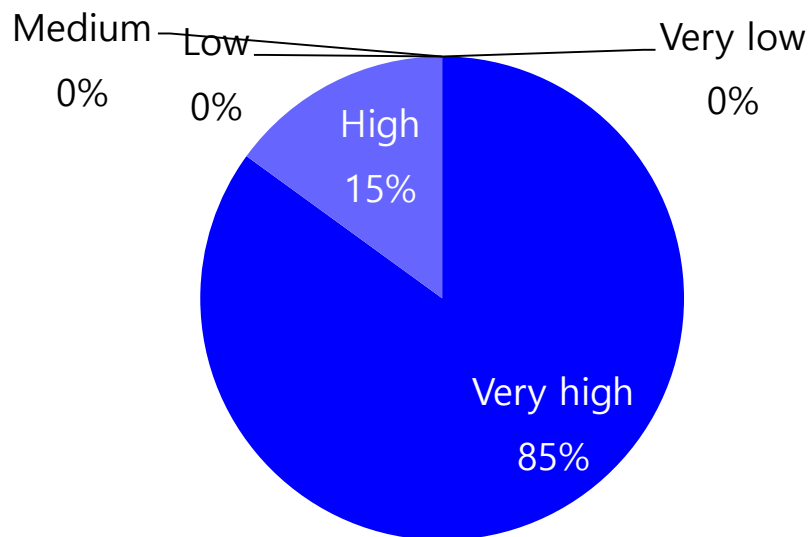
Perfection	Results
4.0	2.9
converted to 100	72.5

Conclusion 75% answered that it helped to save the operation time and 25% said no difference

Review of test results

Protection

It reduces the exposure of surgical wound to the source of infection or tumor cells



Perfection	Results
4.0	3.85
converted to 100	96.3

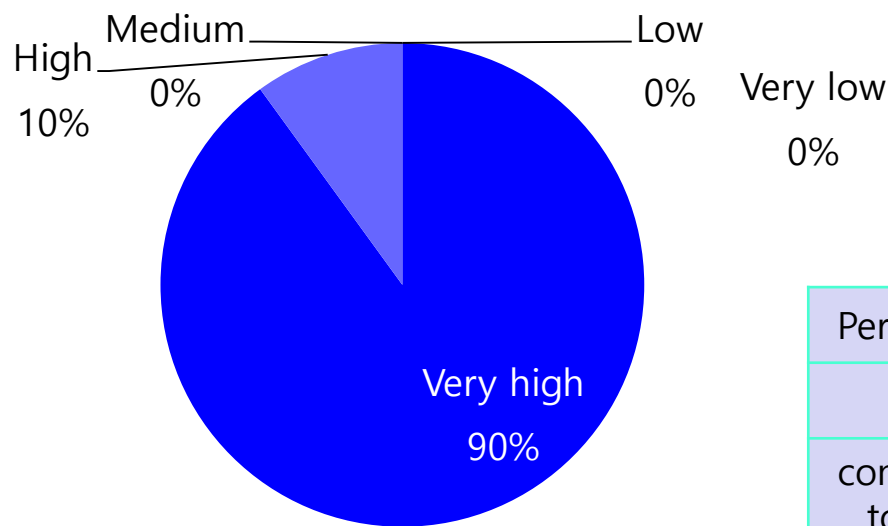
Conclusion

100% answered it reduced the risk of exposure to infection or tumor cells so the role of protection was satisfactory

Review of test results

Protection

It can prevent a localized tension to wound which causes a damaged tissue



Perfection	Results
4.0	3.9
converted to 100	97.5

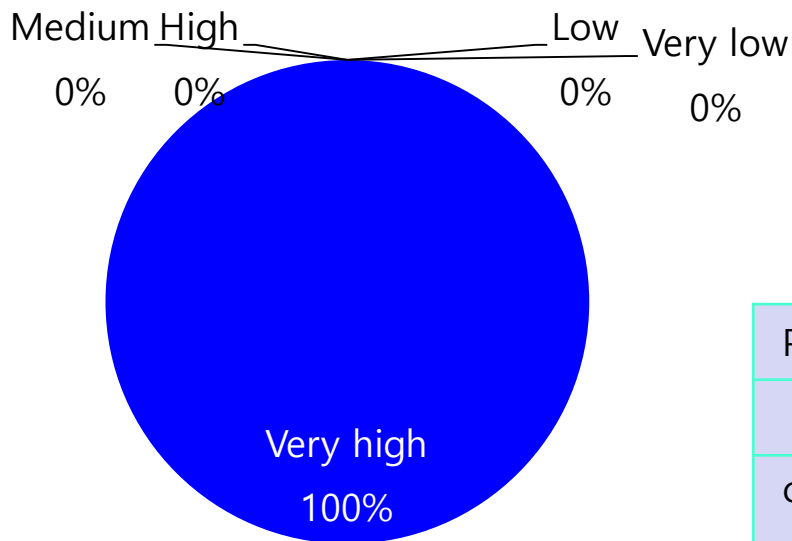
Conclusion

100% answered that it prevented a localized tension of metal retractors so the protective function was achieved

Review of test results

Protection

It can reduce a stray burn caused by electric/ultrasound energy devices



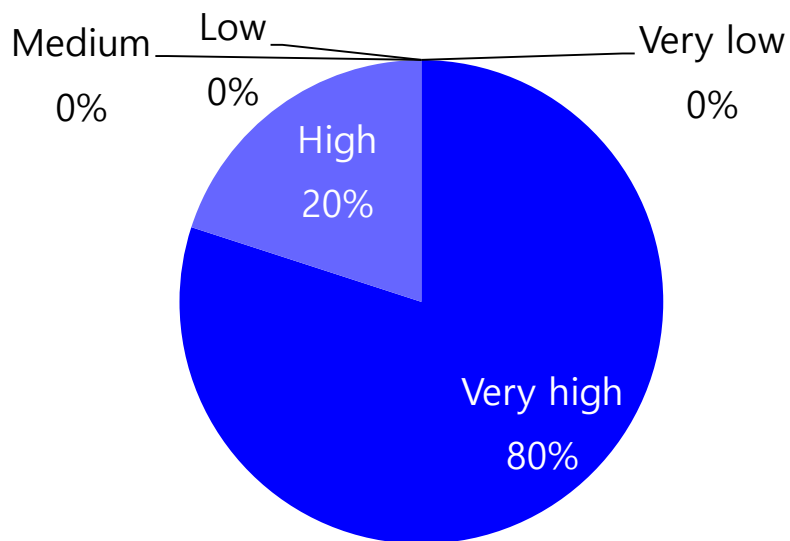
Perfection	Results
4.0	4.0
converted to 100	100

Conclusion

100% gave the highest score on the prevention of stray burns so it was completely effective

Review of test results

Protection It is helpful to reduce a scarring



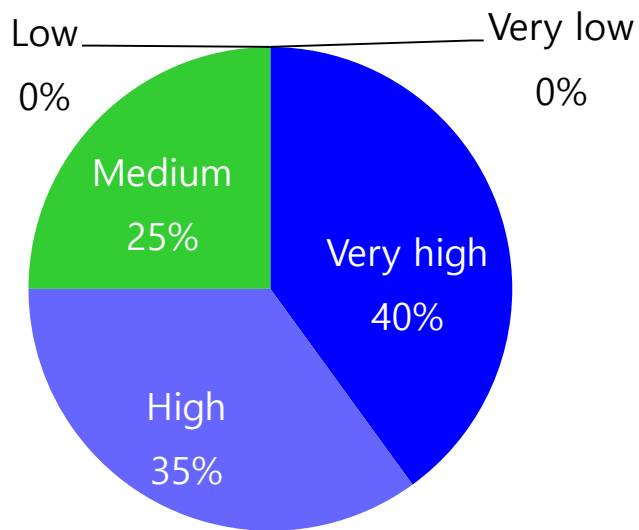
Perfection	Results
4.0	3.8
converted to 100	95

Conclusion 100% answered it improved the scarring and the wound looked obviously a better condition compared to the results of 'without protection'

Review of test results

Protection

It is helpful to reduce a pain of wound after surgery



Perfection	Results
4.0	3.1
converted to 100	77.5

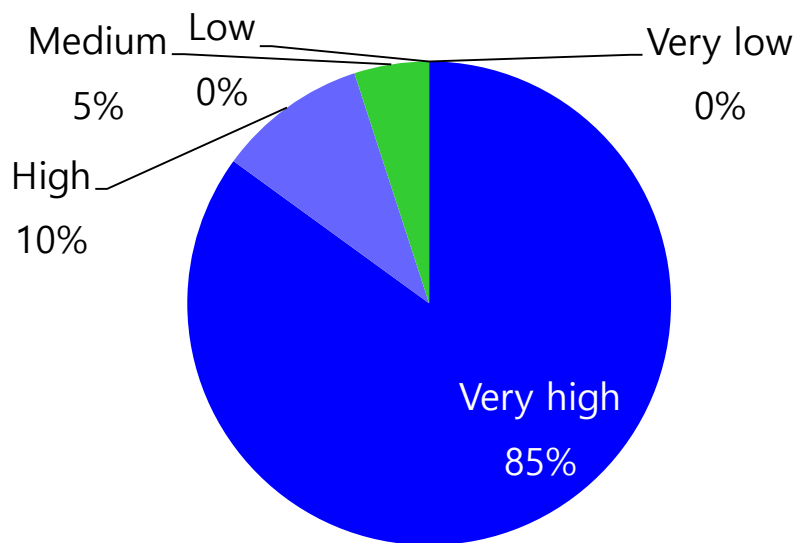
Conclusion

79% answered that is helped to reduce the pain of wound caused by operation while 21% said no difference

Review of test results

Adverse event

The use of surgical devices is not disturbed by components of S-protector or limited on the operation



Perfection	Results
4.0	3.8
converted to 100	95

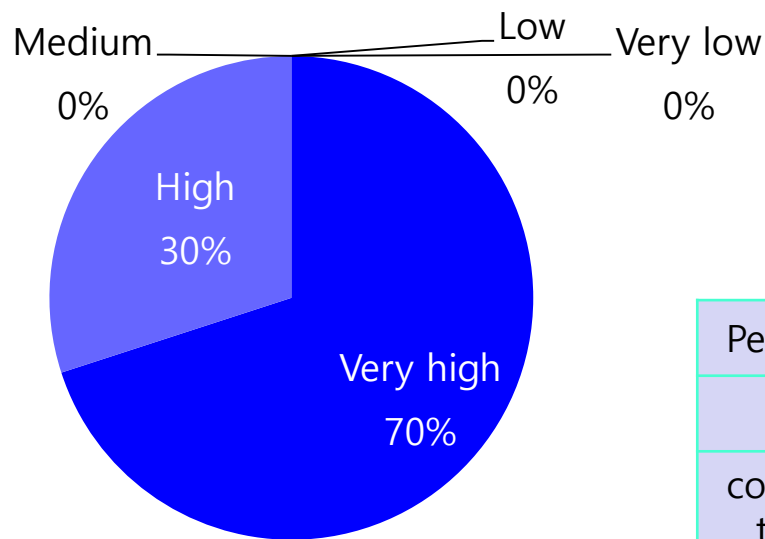
Conclusion

95% answered that the operation was not disturbed by any components of S-protector so it was proved that S-protector dissolved the problem of ring protectors

Review of test results

Improvement

S-protector is superior to a ring plastic wound retractor



Perfection	Results
4.0	3.7
converted to 100	92.5

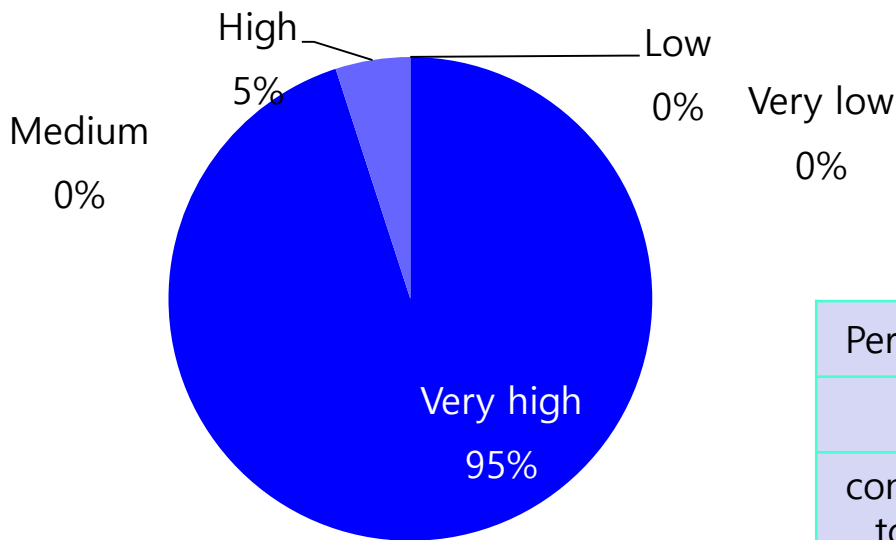
Conclusion

100% answered that S-protector was superior to ring plastic protectors such as Alexis, SurgiSleeves or the similar.

Review of test results

Preference

I want to use S-protector for Thyroidectomy



Perfection	Results
4.0	3.95
converted to 100	98.8

Conclusion

100% answered that they want to use S-protector for Thyroidectomy(95% gave the highest score)
It was proved that S-protector was the most preferable among all wound protectors/retractors

Key comments on the test results

- ✓ S-protector is highly effective for retraction and wound protection
- Dr. W. Y. Jung, Head of Thyroid Cancer Center in Yonsei Severance Hospital
- ✓ S-protector greatly improved the scarring and adhesion which badly affected the patient quality of life after surgery. Compared to the cost, the benefit was outstanding and it was highly efficient. - Dr. J. Y. Choi, Seoul National University Bundang Hospital
- ✓ One of main factors causing a scar after surgery was an excessive tension by metal retractors which resulted in a damage on the skin edge in the surgical site. S-protector was significantly helpful to minimize the localized pressure on the wound. In addition, I could efficiently prevent a stray burns caused by energy devices. - Dr. J. H. Choi, Samsung Medical Center
- ✓ While we were short of surgical assistant, S-protector helped to make a desired retraction for surgery. We could finish the surgery successfully with less assistants thanks to S-protector. - Dr. Y. S. Park, Presbyterian Medical Center

Thank you!!!