



PROF. ALİ FAHİR ÖZER, M.D.

PROF. DR. ALİ FAHİR ÖZER

Onur YAMAN¹

¹ Ass. Prof. of Neurosurgery, Koç University Hospital, Istanbul.

SUMMARY:

Ali Fahir Özer was born in 1953 in Gumushane. He graduated from Erzurum Ataturk University in 1976. He completed his residency at Hacettepe University. In 1989 he became an associate professor and in 1994 he became a full professor. He was the one who performed several spine surgeries for the first time in Turkey. He founded The Peripheral and Spinal Surgery Group in 1995. He served as the president of the spinal group between 1999-2001.

He described numerous surgical techniques in his own name and developed instrumentation systems. He published numerous national and international articles. He used the dynamic system for the first time in Turkey and he is a leader in using dynamic systems. He is one of the leaders in the Turkish Spine Surgery.

Key words: Ali Fahir Özer, spinal surgery, dynamic systems, open window corpectomy

Level of Evidence: Biography, Level V

ÖZET:

Ali Fahir Özer 1953 yılında Gümüşhane'de doğdu. Erzurum Atatürk Üniversitesi'ni 1976 yılında bitirdi. Beyin cerrahisi ihtisasını Hacettepe Üniversitesi'nden aldı. 1989 yılında doçent 1994 yılında profesörlük ünvanını aldı. Türkiye'de omurga cerrahisinde ilkleri gerçekleştirdi. Türk Nöroşirurji Derneği Spinal Grubu'nu 1995 yılında kurdu. 1999-2001 yılları arasında Spinal Grup başkanlığı yaptı.

Kendi adına sayısız cerrahi teknik tanımladı ve enstrümantasyon sistemleri geliştirdi. Çok sayıda ulusal ve uluslararası makale yayınladı. Dinamik sistemi Türkiye'de ilk kez kullanan ve dünyada dinamik sistem enstrümantasyonunun kullanımında söz sahibi omurga cerrahlarından biridir. Türk omurga cerrahisinde lider kişilerden biridir.

Anahtar Kelimeler: Ali Fahir Özer, omurga cerrahisi, dinamik sistem, açık pencere korpektomi

Kanıt Düzeyi: Biyografi, Düzey V

Address: Dr. Onur Yaman,
Davutpaşa Cad., No: 4, Topkapı,
İstanbul.

Tel: 08502508250

Gsm: 05065998527

E-mail: dronuryaman@yahoo.com

Received: 11th May, 2016.

Accepted: 14th June, 2016.

INTRODUCTION:

Ali Fahir Özer is the pioneer of the Turkish neurosurgeon spine surgeons. It's an honour for me to have this privilege of writing the biography of my Professor, Ali Fahir Özer, who started the spine surgery and performed complicated spinal surgeries in Turkey. You may criticize him as inaccessible, silent and a professor who may lose temper at any moment if you don't know him well. However, you start learning how kind, approachable and humanistic he is, when you spend time with him.

During my years of residency, when I developed an interest in spine surgery, I started respecting Professor Fahir even more. Because he was trying to spread out his experience, while at the same time supporting and helping everyone who wanted to learn spine surgery.

Fahir Özer is open to all kinds of personal and scientific criticisms. He is interested in innovation and he is still enthusiastic about his profession as if he were still in his first years. When Fahir Özer switched from fusion to dynamic systems our colleagues said 'For years, he told us about the fusion, so we started fusion. Now he says dynamic'. He developed dynamic systems, tested them biomechanically and supported their national production. And he showed the courage of performing these systems in a centre like the American Hospital.

All these are the clear indications of his open mind for development and change as a leader. Numerous surgical techniques, tools and instrumentation systems developed by

Professor Fahir have had contributions for spine surgery not only in Turkey but also across the world.

The most interesting thing about working with Professor Fahir is learning new things and discovering a new side of him. A lifetime full of spine surgery needs to be published as a book but here is a brief summary of Professor Ali Fahir Özer's life.

LIFE STORY:

He was born in 1953 in Gümüşhane as the first child of Family Özer. His mother Ayhan was a housewife and his father Mehmet was a civil engineer. He has a brother called Reha and a sister called Züleyha. He spent his childhood years in a large mansion in Gümüşhane playing the cowboy game with his cousins. He started elementary school in Dumlupınar Primary School in Gümüşhane (Figure-1).

The family moved to Erzurum because of the father's job, and therefore, he completed elementary school at Culture Institution of Erzurum. He graduated from Erzurum 23 July Middle School. He was the president of the middle school library club. In that period he had the chance to read many world classics.

As childhood memories, he remembers the tough winter conditions in Erzurum and also the little coach trips with his family. He also recalls the Varto earthquake. When the earthquake occurred, he was standing in a garden opposite to their house.

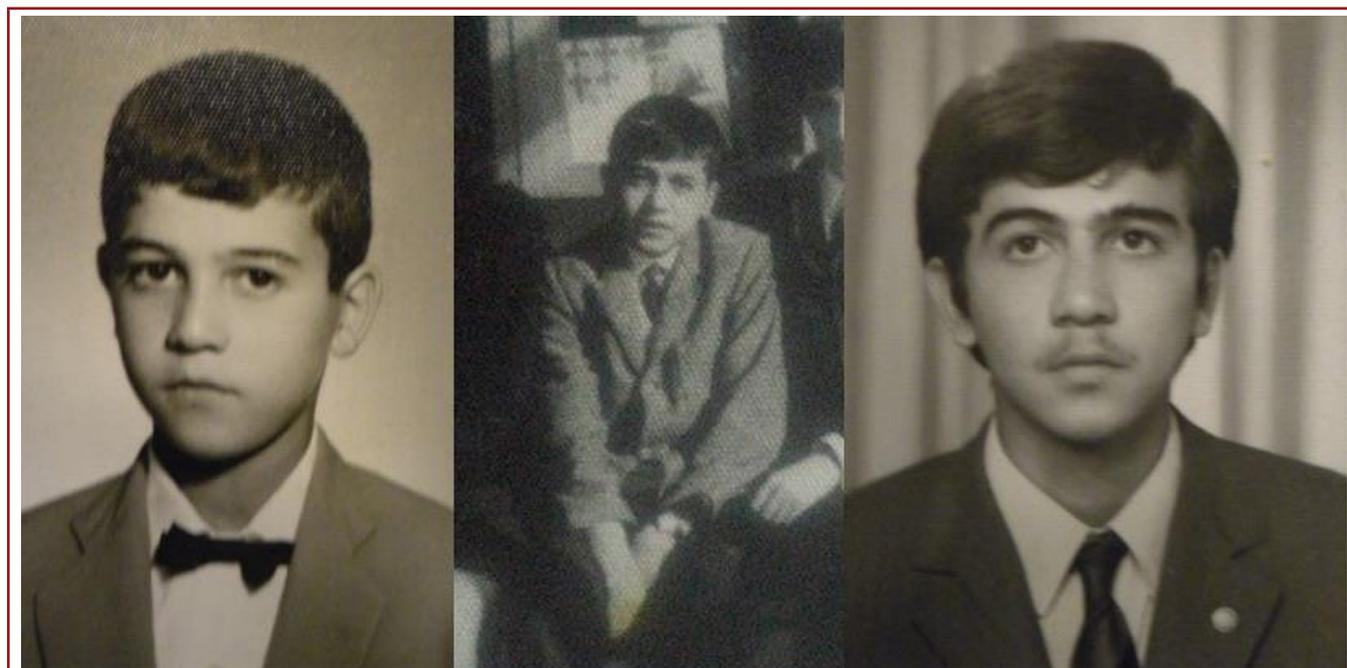


Figure-1. Elementary school, middle school, high school ages of Ali Fahir

He watched his house move from one side to the other side, but it did not collapse. Thus, he got the idea that 'Elastic structures adapt to nature better than static structures'¹⁷.

Later the family moved to Ankara because of the father's job. He was a young man. He started the high school in Ankara Cumhuriyet Lisesi. He had a photographic memory. He answered a question in the history exam about 'Çifte Minare'. His history teacher accused him of cheating because every word he said was exactly as written in the history book. He decided to paraphrase the sentences for next exams. He says his grades were mediocre in mathematics and physics. He dealt with his mathematics teacher and he gave him 5 so that he could pass the class.

At the end of the high school he wanted to enroll in the faculty of medicine, law or Political Sciences. He enrolled in the Faculty of Medicine at Erzurum Atatürk University. Following the first two years in Hacettepe University, he went to Erzurum. His initial years at university were marked with the political turmoil of March 12th. Ali Fahir was impressed by those days when he was a university student. Incidents of the attacks between the right wing and left wing and political instability led to the military coup on March 12th and then came a deep silence in the whole country.

The cadaver course was the first memory he can recall from the faculty of medicine. He would never talk with his friend who prayed with a scalpel before the dissection of the cadaver. In the first faculty years he decided to be an anatomist than a pathologist. In the third semester he wanted to be a hematologist, then he decided to be a surgeon at his fourth year.

In the fifth year, he was affected by two events. When he was a trainee at Pediatrics, there was a child who had tense fontanelle. A neurosurgeon drained the CSF by dipping the needle into child's head. Ali Fahir was astonished, he could not believe it. He developed a respect for neurosurgeons. Then he met Aykut Erbenği. During the time when Dr. Erbenği was teaching him, Fahir Özer was deeply impressed by the way he acted, his personality and style. Based on this he decided to become a neurosurgeon¹⁷.

He graduated from the faculty of medicine in 1976. He decided to take exams for Hacettepe University Department of Neurosurgery. One of his references was Professor Ayhan Göçmen. While they were sitting in the department Professor Yunus Müftü entered. Dr. Göçmen introduced them to each other. Dr. Yunus Müftü said 'Son, you look like a very good man. What will you do with those monsters?'The monsters he referred to would be Fahir Özer's best friends and professors. Those were Dr. Işık Gürel, Dr. Kemal Benli, Dr. Ümit Acar and Dr. Erdem Çötel. Also Dr. Yamaç Taşkın, Dr. Tunçalp Özgen, Dr. Metin Güner, Dr. Kemal Gökdemir would be very close to him like brothers¹⁷.

Fahir Özer was very sick on his first day at Hacettepe and he had fever as high as 39 to 40 degrees. He did not want to leave a bad impression in the beginning. He did not say he was sick. He thought that he could go to bed very early, take a good sleep and the next morning he would feel better. But, instead he could sleep at 4 a.m. and woke up at 6 a.m. He asked himself 'God, where am I?' (Figure-2).



Figure-2. Hacettepe University (1977-1982)

He has lots of memories from his residency years. A few of them: Ecevit was the President of the Republic in those years and there was shortage of everything in the country. Oil was one of the basic necessities that was scarce. They put some oil instead of soap in the toilet. Dr. Cevdet Caner went to the toilet and washed his hands using the oil.

Suddenly he came out looking for Fahir Özer. At that time Fahir Özer was at the department of pediatrics. People warned him saying 'Do not come to the department or he will kill you.' Dr. Hülya Caner was Dr. Cevdet's wife 'and the head of the department of pediatrics'. Fahir Özer called Dr. Hülya and told her that he had not organized that joke and asked for her help. Next morning Dr. Cevdet was still angry at him but could not do anything because of his wife, the head of neurosurgery. Later they discovered that it was Dr. Mehmet Tandoğan had organized the joke.

Another anecdote: There was a constant friction between the departments of pediatrics and neurosurgery. Dr. Ferhan Hamarat had received one of Picasso's paintings from the pediatrics department and he had put in the head's room in the department of neurosurgery. One morning Dr. Fahir came early. Everyone was asleep. He took the painting and he hid it. He hung a notice which said 'Neurosurgeons! It is our painting. We will not let you have it'. The neurosurgeons who heard about this notice started attacking the department of pediatrics. They piled up Nelson's book, baby food, diapers and many other materials in room 61. At day 4, Dr. Tandoğan said 'Fahir, this is your hand writing but where is the painting?'. And everyone learned the truth.

Fahir Özer learned two important things from his professors during his residency; writing scientific papers and comparing treatments to what is said in the literature. Dr. Fahir Özer was deeply impressed by Dr. Vural Bertan as Dr. Bertan went to Canada and studied with Hardy. He brought the necessary surgical equipments with him and started transphenoidal surgery. He was inspired because he thought that new things could be learned and performed. This would have a huge effect on the following years (Figure-3)¹⁷.

At the fourth year of his residency he married Dr. Nesrin Özer. Dr. Nesrin was also an academic who worked on biochemistry. They had a child named Can in 1987. And Can would be an economist (Figure-4).

Fahir Özer completed his military service as a reserve officer in Kayseri Military Hospital. He performed lots of surgeries there. He made his compulsory military service in Ankara Numune Hospital. The heads of department were Dr. Yıldız Yalçınlar and Dr. Yamaç Taşkın . He gained a lot of experience (Figure-5).

He went to Glasgow. He learned lots of things about head trauma and its treatment. And he started performing these techniques at Numune Hospital. Invited by Aykut Erbenği, he returned to Hacettepe University. He started his PhD on Neurosurgical Neurological Sciences Microsurgery. However, he then started Marmara University with Dr. Pamir and left Hacettepe University (Figure-6).



Figure-3. Prof. Dr. Aykut Erbenği and Ali Fahir Özer



Figure-4. Fahir Özer's wife Prof. Dr. Nesrin Özer and his son Can Özer

There very really important changes in spine surgery in those years. New surgical techniques were developed. Laminectomy was the most common surgical procedure for lumbar pathologies. Laminectomy and in-situ fusion and braces for 3 months were the limited techniques for spinal trauma. Terms like stability and instability and instrumentation were rarely used. Transpedicular instrumentation, Kaneda systems for anterior surgeries became more common.

Lots of spinal pathologies could be treated with those new techniques. At that time Dr. Fahir Özer chose to perform more spinal surgeries in his daily practice¹⁷.

He became an associate professor in 1989 and a full professor in 1994. He worked as the head of the Neurosurgery Department at Kocaeli University. Following the invitation of Professor Ali Çetin Sarioğlu he started to work with him at the American Hospital. With his team, they worked like a university hospital for 20 years.



Figure-5. Kayseri Military Hospital in 1983



Figure-6. Founders of Department of Neurosurgery of Marmara University (Mehmet Ozek on the left side Necmettin Pamir on the right side)

CONTRIBUTIONS TO THE TURKISH SPINAL SURGERY:

He performed lots of surgeries as a pioneer. He worked with more than 50 national and international fellows. He published

many 50 national and 150 international papers. Furthermore, he published 9 books as an editor and 43 book chapters.

The American Hospital became a school in the Turkish Spine Surgery. Contributions of Prof. Dr. Ali Fahir Özer to the Spine Surgery Ali Fahir Özer established 'Spinal Surgery Group' with Dr. Mehmet Zileli, Dr Murat Hancı and Dr Nusret Demircan in 1995. He was also one of the first members of Turkish Spine Society.

He performed many surgeries for the first time in Turkey. Performing those surgeries in a private hospital rather than a university hospital made them more important. He performed the first lateral mass screwing and published it³. He performed the first odontoid screwing with Dr. Celal İplikçioglu and performed the first C1-2 Magerl technique and presented it during the EANS meeting in Spain⁴⁻⁵. These two surgical operations were important because they showed the level of spine surgery back in those years. He also used the first cervical disc prosthesis and published it as an article (Figure-7)⁶.

In 1999 he described 'Open window corpectomy' technique for cervical spondylopathic myelopathy and published the long-term results in an article⁷⁻⁸. He suggested creating new holes to increase the fusion rate for the treatment of old odontoid fractures and described a new technique. 5,9 He modified a new technique for the treatment of C7-T1 and published it¹⁰.

He standardized the technique for protecting the ligamentum flavum for the L4-5 and L5-S1 disc herniations¹¹. He described a new operation technique that dynamic screw and dynamic rod could be used in the lateral recess stenosis cases in which facet joint was removed¹².

He performed a new technique for cervical foramina stenosis cases. This new technique increases the foramina via distracting the lateral mass without fusion¹³ He described another new technique for spondylolisthesis. He drilled the pedicle in cases with balanced spondylolisthesis, in which the nerve was compressed in the foramen¹⁴. His colleague Sasani and he described and published single-stage posterior corpectomy and expandable cage placement for treatment of thoracic or lumbar burst fractures and other pathologies¹⁷.

He also found a cervical disc retractor and named it 'Ozer Cervical Disc Retractor' (Figure-8)¹⁵.

He designed 'Dynamic Safinaz Screw System' and used this system¹⁻². He also designed. 'Alfa-D'cervical disc prosthesis' and used it for the treatment of cervical disc herniation (Figure-9).



Figure-7. A picture during a presentation

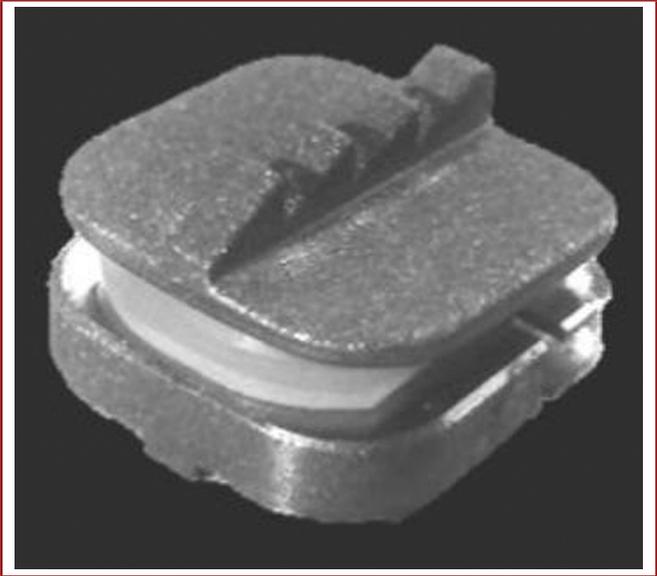


Figure-9. Alfa-D cervical disc prosthesis



Figure-8. Ozer cervical disc retractor

Dr. Fahir Özer spread out the use of dynamic stabilization. He identified the indications of using dynamic stabilization. He classified the dynamic systems. And he created a suitable algorithm for the treatment of lumbar disc herniation¹⁶.

Dr. Fahir Ozer currently works on a new modular dynamic instrumentation system. He finished the biomechanical studies. He will soon start the patient application. He believes that this project will change many things in dynamic systems. Advantage of his new dynamic stabilization is it will be used in multilevel instability so that many deformities can be treated without fusion. He also designed another dynamic screw with Dr. Deniz Erbulut. This new screw can be used in fusion to increase the loads on graft and also can be used to increase the movement when applied on S1 segment. And he also designed a third generation Talin Rod System to use with this system. In the future he will use this system also in the cervical spine. (Figure-10).

He also works on a cervical collar that can prevent cervical injury with Prof. Dr. Kemal Türker from Koç

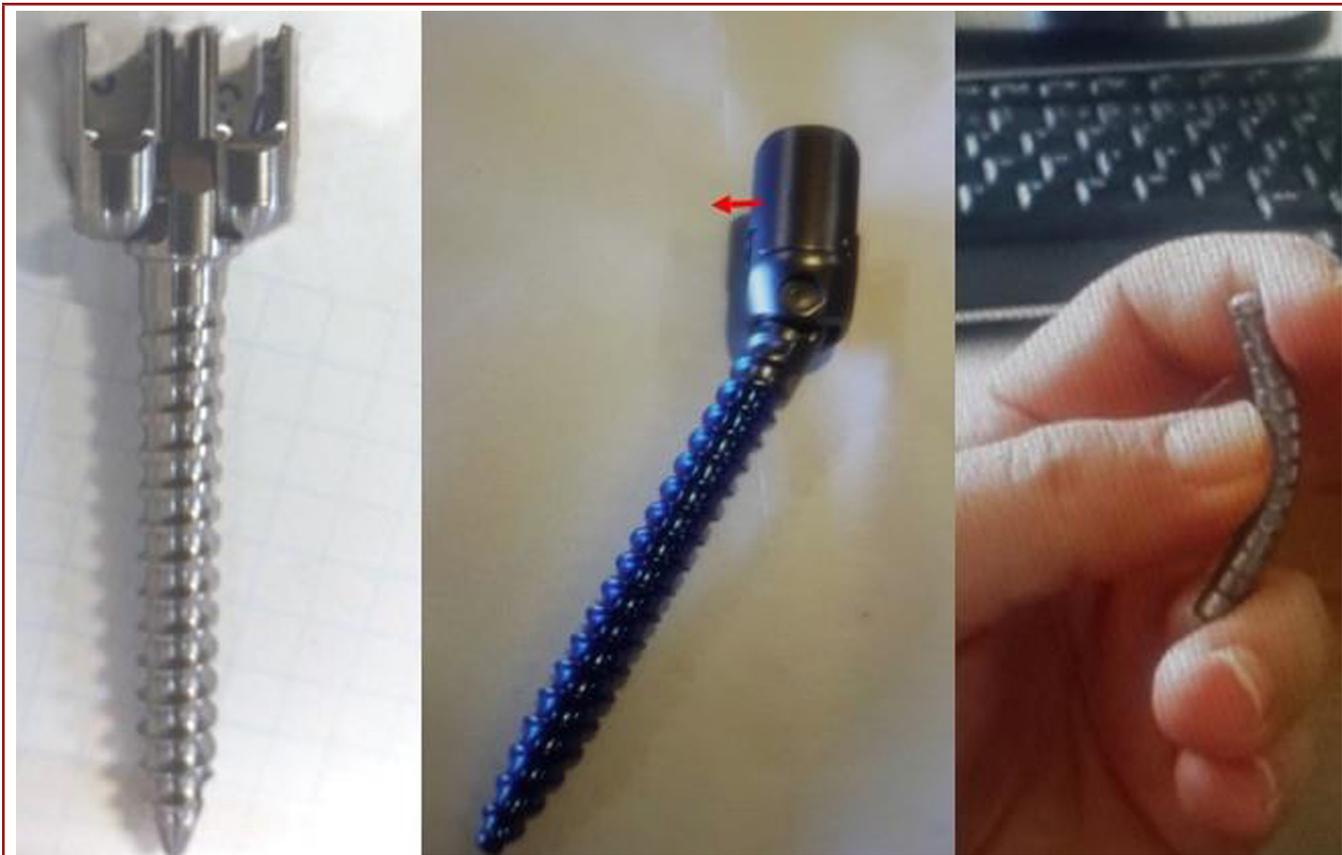


Figure-10. A new dynamic screw with two heads and third generation Talin Rod

REFERENCES:

1. Erbulut DU, Kiapour A, Oktenoglu T, Ozer AF, Goel VK. A computational biomechanical investigation of posterior dynamic instrumentation: combination of dynamic rod and hinged (dynamic) screw. *J Biomech Eng* 2014;136(5): 051007
2. Öktenoglu T, Erbulut DU, Kiapour A, Ozer AF, Lazoglu I, Kaner T, Sasani M, Goel VK. Pedicle screw-based posterior dynamic stabilisation of the lumbar spine: in vitro cadaver investigation and a finite element study. *Comput Methods Biomech Biomed Engin* 2014 (In press).
3. Özer AF, Öktenoğlu T, Kılıç T, Özgen S, Keles GE, Pamir MN. Servikal travmalarda plak vida sistemi ile posterior internal fiksasyon. *Türk Nöroşirürji Dergisi* 1995; 5: 65-69.
4. Özer AF, İplikçioglu C, Sarioğlu AÇ. Tip II odontoid kırığının transodontoid vida ile tespiti. *Türk Nöroşirürji Dergisi* 1997; 7: 31-34.
5. Ozer AF, Iplikcioglu C, Bozkus H, Oktenoglu T, Kalelioglu M, Sarioğlu AC. Trasodontoid screw fixation in type II odontoid fracture. (The first reported series in Turkey). *JTSS* 1998; 9 (2): 67-70.
6. Özer AF, Öktenoğlu T, Sasani M, Bozkuş H, Canbulat N, Sarioğlu AÇ. Servikal Disk Protezi. *Türk Nöroşirürji Dergisi* 2005; 15: 285-290.
7. Özer AF, Oktenoğlu BT, Sarioğlu AC. A new surgical technique: open-window corpectomy in the treatment of ossification of the posterior longitudinal ligament and advanced cervical spondylosis: technical note. *Neurosurgery* 1999; 45(6): 1481-1485.
8. Özer AF, Oktenoglu T, Cosar M, Sasani M, Sarioğlu AC. Long-term follow-up after open window corpectomy in patients with advanced cervical spondylosis and/or ossification of the posterior longitudinal ligament. *J Spinal Disord Tech* 2009; 22(1): 14-20.
9. Özer AF, Cosar M, Oktenoglu TB, Sasani M, Iplikcioglu AC, Bozkus H, Bavbek C, Sarioğlu AC. A new transodontoid fixation technique for delayed type II odontoid fracture: technical note. *Surg Neurol* 2009;71(1):121-125.
10. Özer AF, Kaner T, Sasani M, Oktenoglu T, Cosar M. Anterior approach to disc herniation with modified anterior microforaminotomy at C7-T2: technical note. *Spine* 2009; 34(17): 1879-1883.

-
11. Özer AF, Oktenoglu T, Sasani M, Bozkus H, Canbulat N, Karaarslan E, Sungurlu SF, Sarioglu AC. Preserving the ligamentum flavum in lumbar discectomy: a new technique that prevents scar tissue formation in the first 6 months postsurgery. *Neurosurgery* 2006; 59(Suppl.-1): ONS126-133.
 12. Özer AF, Suzer T, Sasani M, Oktenoglu T, Cezayirli P, Marandi HJ, Erbulut DU. Simple facet joint repair with dynamic pedicular system: technical note and case series. *J Craniovertebr Junction Spine* 2015; 6(2): 65-68.
 13. Özer AF. et al. A novel foraminal expansion technique. *Asian Spine J* 2016 (in press).
 14. Özer AF, Suzer T, Sasani M, Oktenoglu T, Egemen E. Enlargement of neural foramina and dynamic stabilization in spondylolisthesis without restoring the alignment: technical Note. *Korean J Spine* 2016;13(1): 37-39.
 15. Özer AF. A new retractor for the anterior cervical approach. *Brit J Neurosurgery* 1994; 8: 469-470.
 16. Özer AF, Suzer T, Cezayirli P, Erbulut D. Evaluating lumbar disc herniation and other motion segment pathologies from the window of dynamic stabilization systems. *J Spine Neurosurg* 2014; S2.
 17. Sasani M. Özer AF. Single-stage posterior corpectomy and expandable cage placement for treatment of thoracic or lumbar burst fractures. *Spine (Phila Pa 1976)* 2009 Jan 1;34(1):E33-40. doi: 10.1097/BRS.0b013e318189fcd.
 18. Yaman O. Personal talkings. 2016