

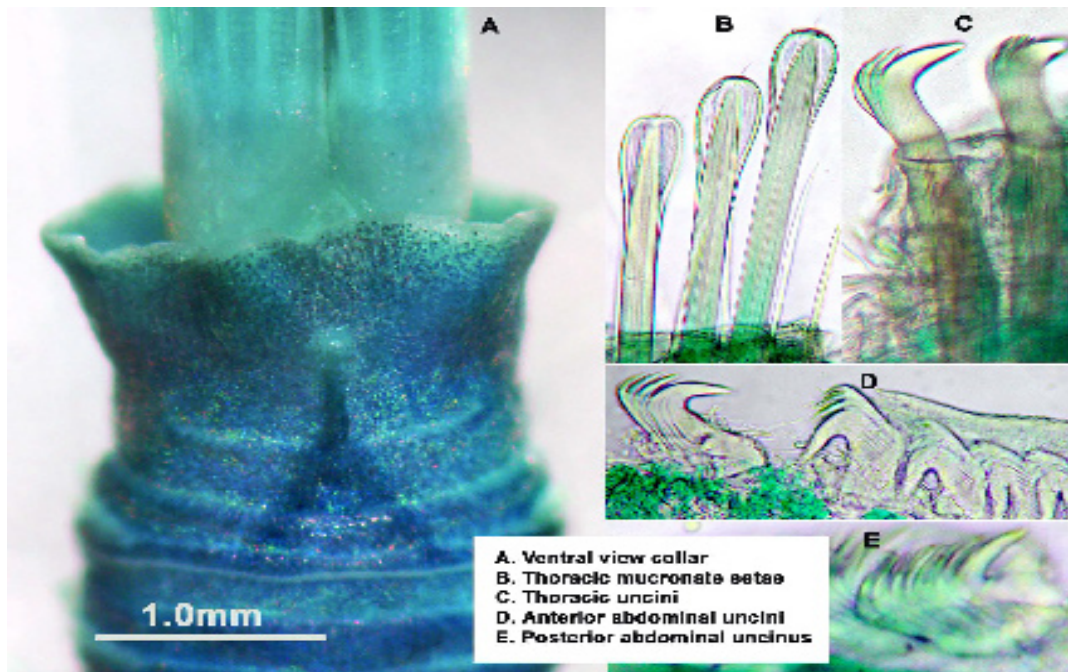
SOUTHERN
CALIFORNIA
ASSOCIATION OF
MARINE
INVERTEBRATE
TAXONOMISTS



January/February, 2007

SCAMIT Newsletter

Vol. 25, No. 5



Chone eiffelturris Tovar-Hernandez 2007. Specimen collected of Carpinteria, CA in shallow water. Photos by Rick Rowe, CSD. (formerly *Chone* sp SD1 fide Langan 1997)

This Issue

JANUARY 2007	2
FEBRUARY 2007	2
UPCOMING MEETINGS	2
EMENDS	4
VOUCHER SHEETS PART DEUX	5
LITERATURE CITED	5
SCAMIT OFFICERS	6

The SCAMIT newsletter is not deemed to be a valid publication for formal taxonomic purposes.

JANUARY 2007

The January SCAMIT meeting was hosted by the City of San Diego. The topic was Miscellaneous Phyla provisional species. The meeting was intended to be a precursor to the Taxonomic Atlas, Ed 4, review meeting on Misc. Phyla. Kelvin Barwick started the day by announcing the upcoming meeting schedule for the next 6 months.

He also reminded us the Santa Barbara Museum of Natural History would no longer be able to support SCAMIT's Listserver and Kelvin was working on establishing a series of Google Groups for maintaining communication among members. Many of you should now be familiar with the Google Groups system, but if you are still having problems or questions please contact Kelvin Barwick at: kbarwick@sfwater.org.

As well, since many members are having some difficulties with the Google Groups, any important notices that need to be seen by the entire membership, will be sent out as an email to the membership via treasurer Cheryl Brantley. She can be contacted at: cbrantley@lacsds.org.

Don Cadien had the floor next and was discussing new amphipod literature. He will be writing something for a future newsletter which will deal with a newly available CD Rom which contains work on the Crustacea of Norway by Sars.

Dean Pasko, in the spirit of Miscellaneous Phyla review, suggested that Misc. Phyla workers plan to meet on an annual basis, for instance in January, to discuss current provisional species. This will keep us all on the same page and hopefully help eliminate duplication of effort which is often seen in this group.

You secretary has nothing specific with regards to any decisions made at the meeting that day, but that is probably due to the fact that no decisions were made; only discussions of problems, with no resolution at that time.

However, on a good note, Dean Pasko did a fine write up of the minutes and activities of the Oedicerotid meeting in February. Please read on for that informative review.

FEBRUARY 2007

The February 2007 meeting on Oedicerotidae was scantily attended. The group consisted of representatives from the host lab (City of San Diego), along with Lisa Haney of the LACSD. Dean Pasko, City of San Diego, presented an overview of the characters he has used to distinguish several species of *Americhelidium*, along with several keys to the SCB Oedicerotidae produced by John Byrne and Ron Velarde. In addition, a listing of the Oedicerotidae reported

UPCOMING MEETINGS

15 Oct (8th is Columbus Day) - Review of Light & Smith's Manual, gastropod chapter, NHMLAC, Education Classroom on second floor. Dr. Jim McLean will join us to discuss his changes & present information about his upcoming books on the gastropods of the southern and northern NEP.

1-2 Nov - SAFIT/SCAMIT meeting on hydrobids with Dr. Robert Hershler (NMNH) followed by an executive meeting with SAFIT. The meeting will be hosted by Weston Solutions, Inc., 2433 Impala Drive, Carlsbad, CA 92010. Please contact Sheila Holt for more information: 760-795-6914.

Dec 13 - Katja Seltmann will be giving a presentation on MorphBank. The meeting will be hosted by the City of San Diego Marine Lab. Please contact Rick Rowe (CSD) for more information: rowepolyid@gmail.com



from SCB was presented. This listing included several of the provisional taxa erected by members of the San Diego Lab.

An *Artificial Key to the Oedicerotidae Reported from the SCB* was distributed. This key distinguished among the major generic groups in the SCB: the *Synchelidium* complex (including *Eochelidium*, *Americhelidium*), the *Monoculodes* complex (including *Monoculodes*, *Pacificolodes*, *Hartmanodes*, *Deflexilodes*), *Bathymedon*, and *Westwoodilla*. Keys to the three major groups were then presented and discussed, and specimens and original descriptions were examined. The ensuing discussions resulted in suggested emendations to certain keys that have yet to be incorporated. The completion of these keys will be forthcoming and posted at SCAMIT's website, Taxonomic Toolbox by October 2007.

The following discussion briefly describes several of the noteworthy species clarifications that resulted. Within *Americhelidium*, specimens of *A. "shoemakeri"*, *A. rectipalmum*, *Americhelidium* sp SD1, and *Americhelidium* sp SD4 were reviewed. Specimens of *A. micropleon* were not available, but the taxon is easily distinguished from the others by (a) the shortened uropod 3 peduncle which is only one-third of the rami length, (b) the rami of uropod 3 reaching only to the mid-point of uropod 2, and (c) the less down-turned rostrum relative to its local congeners. *A. "shoemakeri"* from the SCB was recognized as a complex of potentially 2–3 species possessing an oblique gnathopod 1 and gnathopod 2 that is elongate, narrow, and densely setose. Bousfield and Chevrier (1996) erected several new taxa from the NEP into which our local specimens tend to blend. Our species most closely resembles *A. shoemakeri* (Mills 1962), but cannot be confidently distinguished from *A. pectinatum* Bousfield and Chevrier (1996), *A. variabilum* Bousfield and Chevrier (1996), or *A. millsii* Bousfield and Chevrier (1996). Dean raised an issue with *A. rectipalmum* (Mills 1962) as represented by SCB agencies. The species voucher sheet presented to SCAMIT in 1984 (SCAMIT NL Vol. 3, No. 7) represented pereopod 7 as having a basis absent of even a hint of a posterior lobe (i.e., article 2 is unproduced postero-distally such that the posterior margin of the article ends at the junction with article 3). And, that is the form most often encountered in SCB samples from all agencies, male and female. However, Mills (1962) shows a distinct lobe on pereopod 7 ("P5" in figure 13 of her publication), as does Bousfield and Chevrier (1996). For now, it was decided to make no changes to the species designations, but some review of the type specimen and comparison to our local species is necessary. Finally, two CSD provisional species were dismissed, one maintained, and another confirmed at the meeting. *Americhelidium* sp SD2 and SD3 were submerged within *A. "shoemakeri"* as indistinguishable at this point. *Americhelidium* sp SD1 Pasko 2001 was confirmed. The species is distinguished from *A. "shoemakeri"* by the sparsely setose, relatively robust gnathopod 2, containing a long seta(e) emanating from the antero-distal margin of the propodus and running the length of the dactyl (Figure 1). *Americhelidium* sp SD4 Pasko 2005 was also confirmed. It too is distinguished from *A. "shoemakeri"* by a sparsely setose gnathopod 2, and from *Americhelidium* sp SD1 by the absence of the long distal setae on the propodus of gnathopod 2, the mostly bare propodus proper, and the presence of a pair of setae at the mid-point of the dorsal margin of the dactyl. *Americhelidium* sp SD4 closely resembles *A. rectipalmum*, as currently recognized in the SCB, but is distinguished by the nearly bare propodus of gnathopod 2 and the presence of a large postero-marginal lobe on pereopod 7. Of the described species, it most closely resembles *A. gurjanovae* (Kurdrjaschova and Tzvetkova 1975), as presented in Bousfield and Chevrier (1996).



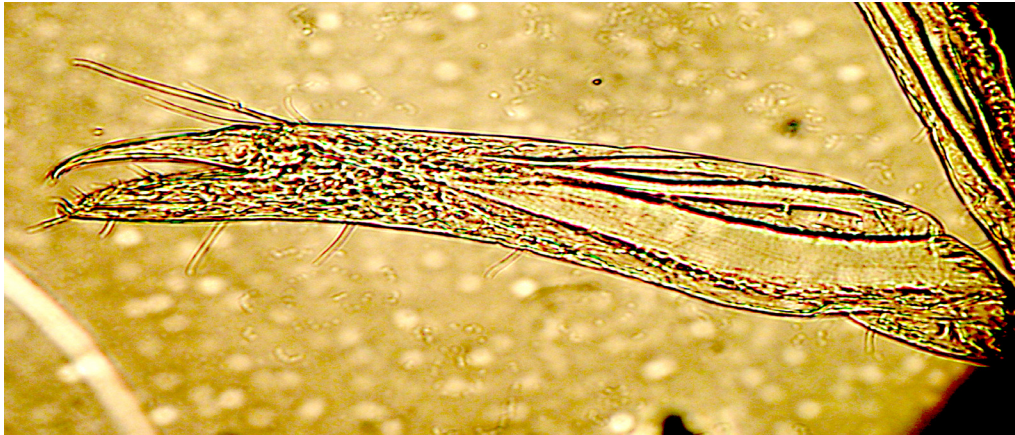


Figure 1. *Americhelidium* sp SD1, gnathopod 2 showing sparse setation and long antero-distal seta of the propodus. (Photo courtesy of Ms. D. Norris, City of San Francisco.)

Among the Monoculodes group, *Hartmanodes* sp SD1 Pasko 1999 (originally described as *Monoculodes* sp SD1 Pasko 1997) was reviewed and confirmed. *Hartmanodes* sp SD1 most closely resembles *Hartmanodes hartmanae* (J.L. Barnard 1962), but is distinguished by an anteriorly produced, ventrally broadened coxa 1, broadened propodi of gnathopods 1 and 2, elongated carpus (anterior margin greater than width of the hind lobe), and a rostrum with a ventral “keel” that is concave. In contrast, *Deflexilodes* sp SD1 Pasko 1998 was determined to be *D. enigmaticus* Bousfield and Chevier 1996.

There was little trouble with the key to members of *Bathymedon*, except for a vigorous discussion of how to distinguish *Bathymedon* from *Westwoodilla*. The two taxa are poorly defined and variations in rostrum development, presence/absence of eyes, and gnathopod development within each group, make the two taxa difficult to distinguish (See Barnard and Karaman 1991).

Finally, a delay in the publication of these newsletters can sometimes have unforeseen benefits. Several months after the February meeting, the latest Edition of Light’s Manual was released. In the amphipod section of that publication Dr. J. Chapman listed *Westwoodilla tone* Jansen 2002 as the local representative of the genus, instead of *W. caecula* (Bate 1857) as has been previously reported by SCAMIT member agencies. Subsequent review of Jansen’s publication and specimens collected by the City of San Diego and Orange County Sanitation District have confirmed our SCB species to be in agreement with *W. tone*. This change will be reflected in the upcoming edition of SCAMIT species list.

EMENDS

In the SCAMIT NL, Vol 25 (3), some of the *Nuculana* figure legends were incomplete. Kelvin Barwick emailed the following emendations. Please make the necessary corrections in your copy of the Newsletter.

Page 4 the caption for figure 6 should read: “Figure 6 - *Nuculana penderi* LACSD: E-30, Nov., 1997 (Length ranges from 2.8 mm to 3.2 mm.)”.

Page 5 figure 9 should read: “Figure 9 - *Nuculana elenensis* Sowerby syntype BMNH 1967975 (Length = 14 mm) (Image by P. Valentich-Scott)”



VOUCHER SHEETS PART DEUX

Attached are 3 polychaete voucher sheets which were submitted for inclusion in the Taxonomic Listing Edition 5. Please peruse and enjoy. They will also be posted in the Taxonomic Tools Section on our Website.

LITERATURE CITED

- Barnard, J. L. and G. S. Karaman 1990. The families and genera of marine gammaridean Amphipoda (except marine gammaroids). Part 2, Records of the Australian Museum, 13 (Suppl. 13): 419-866.
- Bousfield, E. L. and A. Chevrier 1996. The amphipod family Oedicerotidae on the Pacific coast of North America. Part 1. The *Monoculodes* and *Synchelidium* generic complexes: Systematics and distributional ecology. *Amphipacifica*, 2(2): 75-148.
- Mills, E. L. 1962. Amphipod crustaceans of the Pacific coast of Canada, II. Family Oedicerotidae. National Museum of Canada, 15: 1-21.
- Carlton, J.T. 2007. The Light and Smith Manual Intertidal Invertebrates from Central California to Oregon Fourth Edition, Completely Revised and Expanded, Fourth Edition. University of California Press, Pp 545-618.



Please visit the SCAMIT Website at: www.scamit.org

SCAMIT OFFICERS

If you need any other information concerning SCAMIT please feel free to contact any of the officers at their e-mail addresses:

President	Larry Lovell (310)830-2400X5613	llovell@lacsd.org
Vice-President	Leslie Harris (213)763-3234	lharris@nhm.org
Secretary	Megan Lilly (619)758-2336	mlilly@sandiego.gov
Treasurer	Cheryl Brantley (310)830-2400x5605	cbrantley@lacsd.org

Hard copy back issues of the newsletter are available. Prices are as follows:

Volumes 1 - 4 (compilation).....	\$ 30.00
Volumes 5 - 7 (compilation).....	\$ 15.00
Volumes 8 - 15	\$ 20.00/vol.

Single back issues are also available at cost.

The SCAMIT newsletter is published every two months and is distributed freely to members in good standing. Membership is \$15 for an electronic copy of the newsletter, available via the web site at www.scamit.org, and \$30 to receive a printed copy via USPS. Institutional membership, which includes a mailed printed copy, is \$60. All new members receive a printed copy of the most current edition of "A Taxonomic Listing of Soft Bottom Macro- and Megainvertebrates ... in the Southern California Bight." The current edition, the fourth, contains 2,067 species with partial synonyms. All correspondences can be sent to the Secretary at the email address above or to:

SCAMIT

C/O The Natural History Museum, Invertebrate Zoology

attn: Leslie Harris

900 Exposition Boulevard

Los Angeles, California, 90007

SCAMIT VOUCHER SHEET

Species name: *Levinsenia* sp. B SCAMIT, 2007

SCAMIT Vol. 25, No. 5

Family: Paraonidae

Prepared by: Larry Lovell, LACSD: August 31, 2007

Synonymy: *Levinsenia oculata* of authors NEP (in part), not Hartman, 1957.
Levinsenia gracilis of Blake, 1996 (in part).

Material: *Levinsenia oculata*: Holotype lot, LACM-AHF 0651, 92 specimens.
Various specimens from survey work performed in southern California
1975-present.

Literature: Blake, J. A. 1996. Paraonidae. *In* Taxonomic Atlas of the Santa Maria Basin and Western Santa Barbara Channel, Vol 6, The Annelida Part 3, Chapter 2. pp. 27-70.
Hartman, O. 1957. Orbiniidae, Apistobranchidae, Paraonidae and Longosomatidae. *Allan Hancock Pacific Expeditions* 15(3): 211-393, plates 20-44.
Lovell, L.L. 2002. Paraonidae (Annelida:Polychaeta) of the Andaman Sea, Thailand. *Phuket Marine Biological Center Special Publication*, 24: 33-56, Figs. 1-9.
Streltsov, V. A 1973. Polychaete Worms of the family Paraonidae (Polychaeta:Sedentaria) *Akademiya Nauk SSSR, Leningrad*. Pp. 1-120. (In Russian). (Translated in to English for the Smithsonian Institution and the National Science Foundation by Amerind Publishing Co. Pvt. Ltd., New Delhi, India, 1979.)

Diagnostic Characters:

1. Prostomium conical with terminal sensory organ, nuchal grooves present at rear of prostomium, median antennae absent.
2. Pre-branchial segments inflated (see Fig. 1), number 6-7. 16-20 pairs of branchiae, marginally ciliated with rounded tip, first 1-2 pairs shorter.
3. Median and posterior setigers with well-developed dorsal intersegmental furrow (see Fig. 2).
4. Up to 12 modified neurosetae, beginning around setiger 31, with a double rowed arrangement further back. Superior modified setae longer and straighter transitioning to shorter more recurved setae in the inferior position. Capillary setae only present in rear row of superior position (see Fig. 3).
5. Methyl green staining pattern with lateral spot in abdominal segments (see Fig. 2).

Species name: *Levinsenia* sp. B SCAMIT, 2007

SCAMIT Vol. 25, No. 5

Family: Paraonidae

Prepared by: Larry Lovell, LACSD: August 31, 2007

Related Species and Character Differences:

Levinsenia gracilis (Tauber, 1879) – pre-branchial area not inflated, modified setae similar in size and shape with convex fringe, no inferior double row, no MG staining spots post-branchially.

Levinsenia kirbyae Lovell, 2002 – is very closely related to *L.* sp B, but comes from the Andaman Sea in the eastern Indian Ocean and Gulf of Thailand in the western Pacific Ocean. It also has double-rowed modified setae and MG staining spots.

Levinsenia multibranchiata (Hartman, 1957) – differs in having 28-36 branchial pairs, modified setae in single rows posteriorly, no MG staining spots post-branchially.

Levinsenia oculata (Hartman, 1957) – with pigmented prostomium, pre-branchial area not inflated, does not possess double rows of modified setae, no MG staining spots post-branchially. This species is poorly defined.

Levinsenia sp. SD1 *fide* Barwick, 2000 – differs by having 4-8 pairs of short, flattened, cupped branchiae; modified setae strongly curved with a hood, in a single row alternating with capillary setae.

Discussion:

When I began working on southern California Paraonidae in 1975 Streltsov (1973) had just published his review of the family in Russian. One illustration for *L. oculata* (Fig 58D) showed modified setae in the inferior position being more recurved and with a partial second row behind the first. Hartman's original description even mentioned a change in setal shape. Since other character states such as number and length of branchiae were more difficult to use, this setal character became the primary diagnostic character used by me in separating *L. gracilis* and *L. oculata*.

Examination of the holotype lot for *L. oculata* revealed that the double-rowed modified setae illustrated by Streltsov were not found on the type specimens examined. In spite of this problem, the use of the name *L. oculata* for specimens with the double-rowed modified setae was continued by most working in southern California, but not all. Blake (1996) reports a single specimen of *L. gracilis* thus, "The specimen from Sta. 94 has up to 10 spines per fascicle that are sometimes arranged in what appear to be two rows. In other respects it resembles *L. gracilis*." The specimen Blake references is probably *L.* sp B.

SCAMIT VOUCHER SHEET, cont.

Species name: *Levinsenia* sp. B SCAMIT, 2007

SCAMIT Vol. 25, No. 5

Family: Paranoid

Prepared by: Larry Lovell, LACSD: August 31, 2007

Discussion: cont.

Clearly there has been confusion regarding the identity of *Levinsenia* specimens with double-rowed modified setae. Erecting a provisional name and voucher sheet for these specimens will hopefully clarify things.

Depth range: 45 – 60 m.

Distribution: Southern California.

Illustrations:



Figure 1. Anterior showing inflated pre-branchial area.



Figure 2. Whole body showing M.G. staining and dorsal intersegmental furrow.



Figure 3. Double-rowed modified neurosetae.

***Paranaitis* sp SD1** fide Velarde 1998

ABC labs Goleta B1-3 6Oct05 27.5 m specimen in RCRpersColl

Specimens have been collected by the City of San Diego at moderately shallow depths (the old outfall survey depths of approximately 100 meters)

1. Pure white
2. Large, broad, terminally rounded dorsal and ventral cirri
3. Nuchal papilla is either absent or so reduced that it is not revealed even with alcian blue staining.
4. Tentacular cirri are short, basally broad, and with drawn out tips.
5. Tentacular formula is $(0\ 1/0 + 0\ 01/1) + S\ 1/V$ There are definitely no setae or a setal lobe on the 2nd tentacular segment.
6. Single pair of large brown eyes.
7. The dorsal cirri overlay the dorsum and parapodia similar to the elytra of a scaleworm but with over half of the dorsum exposed.
8. Alcian blue stain reveals thin, short, white, radiating subdermal structures along the border of the dorsal cirri. (at least in the Goleta specimen)
9. Very large single tooth at terminus of compound setae shafts.

Trichobranchidae sp. LA1

Material examined:

Bight '03 Station 4001 792m depth 6 specimens

Bight '03 Station 4392 610m depth 1 specimen

Diagnostic characters:

4 prs. of branchiae (8 total) all pectinate with cirriform tip arranged as illustrated below with 4 across and then 2 pr. centered below those and another 2 pr. centered below those.

17 thoracic setigers

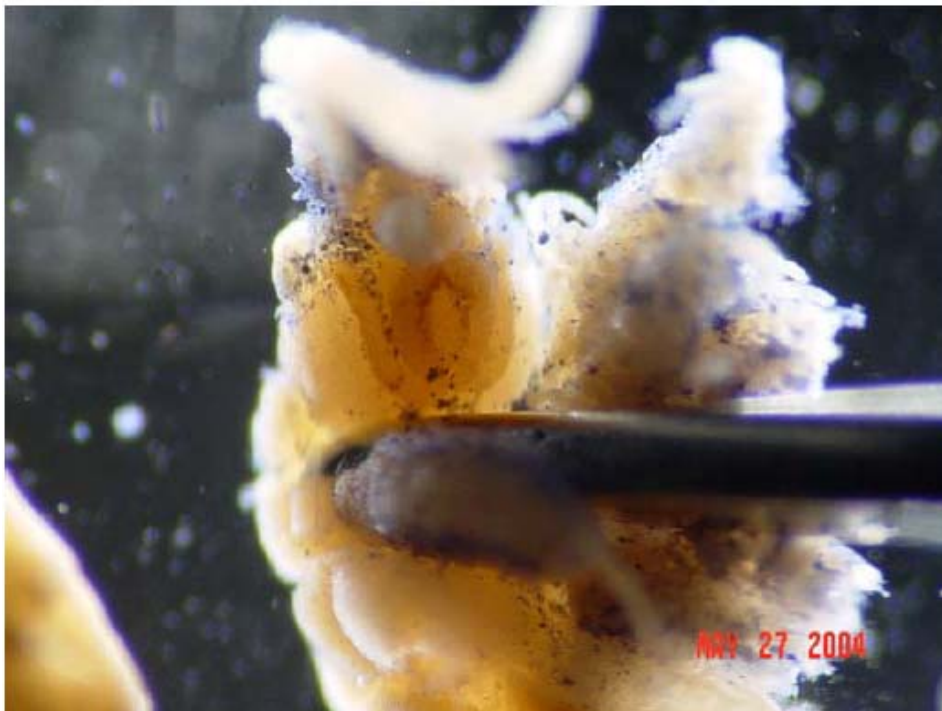
Uncini start on setiger 6 and are long shafted hooks with the main fang surmounted by crest of smaller teeth

Notosetae smooth and straight with long tips slightly bent- limbate capillaries

No lateral lappets but the 1st 4 setigers are somewhat inflated

Unusual looped or sinous shaped gland on back of prostomium underneath branchia





Unusual looped gland
(Just above forceps)